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OUR COMPANY

MORE THAN 30 YEARS OF EXPERIENCE IN IVD (KITS AND INSTRUMENTATION)

DIAsource ImmunoAssays (a BioVendor Group company), an international diagnostic company (Belgium), develops, manufactures and markets clinical diagnostic products in the field of endocrinology and infectious diseases. Core products are based on RIA and ELISA technology and also include reagents to be run on open ELISA automated analyzers as well as antibodies for use in in-vitro diagnostic assays. DIAsource has specific development and manufacturing programs for Vitamin D, Renin, Calcitonin and many others parameters. We also provide selected instrumentation: we offer ELISA reader, washer and shaker, along with open and closed fully automated ELISA platforms helping our customers to automate their tests. It is our ambition to use our 30 years of expertise in Antibody and Assay development to remain a well-known company of diagnostic immunoassays and instrumentation for the IVD market.

MISSION

Our mission is to develop, manufacture and market a complete panel of quality immunoassays and instrumentation as accurate, reliable, diagnostic tools to detect and monitor endocrine disorders and infectious diseases. We are dedicated to provide highly reliable quality assays and instrumentation to deliver uncompromising support to our customers. We strive to meet for meeting our customers needs through a long-term professional relationship and by offering a real added value. Our company is driven by commitment to quality of products and services.

O PRODUCT RANGE

During the last 30 years, we have developed manual ELISA and RIA immunoassays for the diagnosis and monitoring of a wide variety of endocrine disorders. We constantly rework and develop specific antibodies for use in our diagnostic assays. In addition we offer these antibodies also to other diagnostic companies. Constantly looking for new technologies and applications, we put our expertise in the development of new antibodies (patent pending) and assays to measure 25OH Total Vitamin D (D2+D3). We strengthen our position in the diagnostic market by validating our ELISA assays on our open and closed automates. This innovation marks a turning point for our company, and makes of DIAsource, already renowned in the RIA market, a complete diagnostic provider. The interest in Vitamin D is rising rapidly. Since more than 10 years DIAsource manufactures immunoassays for 25OH Vitamin D3 and 1,25 (OH)₂ Vitamin D. In our assay development program, we are focusing specifically on new Vitamin D assays. We introduced a new Total Vitamin D (D2 + D3) RIA and ELISA assay, an innovative free 25OH Vitamin D ELISA kit, together with a Rat 25OH Vitamin D ELISA kit for clinical research studies. The ELISA versions can also be applied on our instruments.

O COMMITMENT TO QUALITY

We believe that the quality of products and services finds its origin in scientific expertise, good organization of all operational activities and in well-structured decision processes. These principles are laid out in our ISO 13485:2016 quality manual. Through the integration of product quality in our development and manufacturing processes and a specific customer-oriented approach, we have directed our quality system to comply with the harmonized standard for quality systems within the context of the European Directive for In Vitro Diagnostics. Our internal quality management system is designed to pursue a continuous improvement of our customer service, our product quality and the efficiency of our operations. All our kits and instruments for in-vitro diagnostics (IVD) carry the CE mark and comply with IVD Directive requirements.

Eric Maes

Business Segment Manager ELISA, Instruments & Antibodies DIAsource ImmunoAssays S.A.

Thor cu

Beatrice de Borman

CEO

DIAsource ImmunoAssays S.A.

CONTACT US

Our people, our professional and experienced Customer Service and Technical Support teams are dedicated to ensure complete customer satisfaction. We take pride in providing helpful and accurate information in a 24-hour turnaround time. Ordering: please see below and consult the 'How to order' section for your local contact.



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AUTO-IMMUNITY

Autoimmunity is the failure of an organism to recognize its own constituent parts as self, which results in an immune response against its own cells and tissues. Any disease that results from such an aberrant immune response is termed an autoimmune disease. Prominent examples include Coeliac disease, diabetes mellitus type 1 (IDDM), systemic lupus erythematosus (SLE), Sjögren's syndrome, Churg-Strauss Syndrome, multiple sclerosis (MS), Hashimoto's thyroiditis, Graves' disease, idiopathic thrombocytopenic purpura, and rheumatoid arthritis (RA).

| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks | |
|--------|--|-------|------|----------------|---------------------|-------------------|------------|-------------|-----------------------|------------------------------|---------|--|
| | Anti-TSH Receptors AutoAntibodies (TSH-R Ab) | | | | | | | | | | | |
| ELISA | KAPD4834 | HRP | 96 T | S | 75 | 2 | 0,4-30 U/L | 0,08 U/L | 3,25 | 48 | | |

| Format | Cat# | Description | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|-----------|--------------|---|-------|------|----------------|---------------------|-------------------|-------|---------------|-----------------------|------------------------------|---------|
| | | | | | A | NA | | | | | | |
| DIASpot M | KAPDTANA8 | ANA ⁸ IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot M | KAPDTANA12S | ANA ¹² Screen IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTANA8N | ANA ⁸ IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot M | KAPDTANA10 | ANA ¹⁰ IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTANA10N | ANA ¹⁰ IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot N | KAPDTANA12SN | ANA ¹² Screen IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTANA12N | ANA ¹² IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot N | KAPDTANA25N | Multi ^{Quant} ANA25 Screen IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot N | KAPDTANA19N | Multi ^{Quant} ANA ¹⁹ IgG | - | 24 T | Serum | 10 µl | - | - | > 99% - > 99% | 0,75 | 52 | |
| ELISA | KAPD3562 | ANA-8-screen | HRP | 96 T | S - P | 10 µL | 1 | - | 96,4 - 98% | 30/15/15/5min RT | 72 | |
| | , | | | | A۱ | 1CA | | | | | | , |
| DIASpot M | KAPDTANCAG | ANCAGBM IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTANCAGN | ANCA ^{GBM} IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot N | KAPDTANCAN | ANCA2 IgG | - | 24 T | Serum | 10 µL | - | - | > 89% - > 98% | 0,75 | 52 | |

S=Serum - P=Plasma

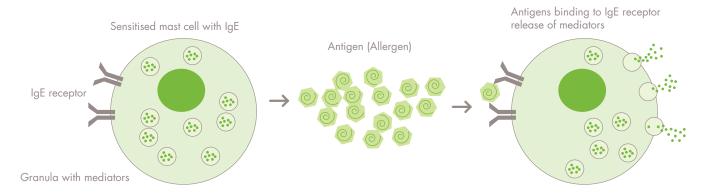


| Format | Cat# | Description | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|-----------|-------------|------------------------------------|-------|------|------------------|---------------------|-------------------|---------------|---------------|-----------------------|------------------------------|---------|
| | | | | | A | \PS | | | | | | |
| DIASpot N | KAPDTAPSGN | APS IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| | | | | | AS | SCA | | | | | | |
| DIASpot N | KAPDTASCCN | ASCA IgG + IgA | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| ELISA | ScA096 | EIA ASCA IgA | HRP | 96 T | Serum, Plasma | 20 | 3 | 5-80 U/ml | 98,50% | 1,25 37°C | 72 | |
| ELISA | ScA096 | EIA ASCA IgG | HRP | 96 T | Serum, Plasma | 20 | 3 | 5-80 U/ml | 98,60% | 1,25 37°C | 72 | |
| | | | | | C | СР | | | | | | |
| ELISA | CCPA96 | EIA CCP IgA | HRP | 96 T | Serum, Plasma | 10 | 3 | 10-800 U/ml | 98,70% | 1,5 37°C | 60 | |
| ELISA | CCPG96 | EIA CCP IgG | HRP | 96 T | Serum, Plasma | 10 | 3 | 10-800 U/ml | 98,80% | 1,5 37°C | 60 | |
| | | | | | ds[| AMC | | | | | | |
| ELISA | DNA096 | EIA dsDNA | HRP | 96 T | Serum, Plasma | 10 | 3 | 10 - 600 U/ml | 98% | 1,25 37°C | 52 | |
| | | | | | Conn | ectivitis | | | | | | |
| DIASpot N | KAPDTCT10N | Connectivitis ¹⁰ IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| | | | | | Cyto | plasm | | | | | | |
| DIASpot N | KAPDTCY6N | Cytoplasm ⁶ IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| | | | | | E | NA | | | | | | |
| DIASpot M | KAPDTENA | ENA ⁶ lgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTENAN | ENA ⁶ lgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| ELISA | ENA012 | EIA ENA profile | HRP | 12 T | Serum, Plasma | 10 | 3 | - | 97,40% | 1,25 37°C | 48 | |
| ELISA | ENAp12 | EIA ENA profile plus | HRP | 12 T | Serum, Plasma | 10 | 3 | - | 95,30% | 1,25 37°C | 48 | |
| ELISA | ENA096 | EIA ENA Screen plus | HRP | 96 T | Serum, Plasma | 10 | 3 | - | 96,10% | 1,25 37° C | 72 | |
| ELISA | SSA096 | EIA SS-A | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 95,80% | 1,25 37°C | 72 | |
| ELISA | Ro6096 | EIA SS-A/Ro60 | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 95,80% | 1,25 37°C | 48 | |
| ELISA | Ro5296 | EIA SS-A/Ro52 | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 95,80% | 1,25 37°C | 48 | |
| ELISA | SSB096 | EIA SS-B | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 97,90% | 1,25 37°C | 72 | |
| ELISA | Sm0096 | EIA Sm | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 97,40% | 1,25 37°C | 72 | |
| ELISA | RNP096 | EIA U1RNP | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 97,70% | 1,25 37°C | 72 | |
| ELISA | Scl096 | EIA SCI-70 | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 97,90% | 1,25 37°C | 72 | |
| ELISA | CEN096 | EIA Centromere | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 96,40% | 1,25 37°C | 48 | |
| ELISA | Jo1096 | EIA Jo-1 | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 95,50% | 1,25 37°C | 72 | |
| | | | | | Ga | stritis | | | | | | |
| DIASpot M | KAPDTIFPCA | Gastritis IgG | - | 24 T | Serum | 10 pL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTIFPCAN | Gastritis IgG | - | 24 T | Serum | 10 pL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot M | KAPDTENDA | Celiac IgA | - | 24 T | Serum | 10 pl | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTENDAN | Celiac IgA | - | 24 T | Serum | 10 pl | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot M | KAPDTENDG | Celiac IgG | - | 24 T | Serum | 10 µl | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTENDGN | Celiac IgG | - | 24 T | Serum | 10 µl | - | - | > 99% - > 99% | 0,75 | 52 | |

| Format | Cat# | Description | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|-----------|-------------|---|-------|-------|------------------|---------------------|-------------------|-------------|---------------|-----------------------|------------------------------|---------|
| | ' | ' | | | Gli | adin | • | | ' | | , , , | |
| ELISA | GIA096 | EIA Gliadin IgA | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-80 U/ml | 95,50% | 1,25 37°C | 72 | |
| ELISA | GIG096 | EIA Gliadin IgG | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-80 U/ml | 95,50% | 1,25 37°C | 72 | |
| ELISA | GDA096 | EIA Gliadin DA IgA | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-200 U/ml | 95,50% | 1,25 37°C | 60 | |
| ELISA | GDG096 | EIA Gliadin DA IgG | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-200 U/ml | 97,70% | 1,25 37°C | 60 | |
| | | | | | Intrinsi | c Facto | r | | | | | |
| DIASpot N | KAPDTIFN | Intrinsic Factor IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| | | | | | Li | ver | | | | | | |
| DIASpot M | KAPDTLI7 | Liver ⁷ lgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTLI7N | Liver ⁷ lgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot N | KAPDTLI5N | Liver ⁵ lgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot N | KAPDTLI10N | Liver ¹⁰ lgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| DIASpot N | KAPDTLI10QN | Multi ^{Quant} Liver ¹⁰ IgG | - | 24 T | Serum | 10 µl | - | - | > 99% - > 99% | 0,75 | 52 | |
| | | , , | | | Milk Int | oleranc | ce | | | | | |
| DIASpot N | KAPDTBSN | Milk Intolerance IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| ELISA | MiA096 | Milk IgA | HRP | 96 T | Serum, Plasma | 10 | 3 | 5 -100 U/ml | 95,20% | 1,25 37°C | 72 | |
| ELISA | MiG096 | Milk IgG | HRP | 96 T | Serum, Plasma | 10 | 3 | 5 -100 U/ml | 95% | 1,25 37°C | 72 | |
| ELISA | MiM096 | Milk IgM | HRP | 96 T | Serum, Plasma | 10 | 3 | 5 -100 U/ml | 95,20% | 1,25 37°C | 48 | |
| | | | | | Mitoc | hondria | | | | | | |
| DIASpot N | KAPDTMI2N | Mitochondria² IgG + IgM | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| | | | | Polyn | nyositis | - Sclerc | derma | | | | | |
| DIASpot M | KAPDTPMS8 | Polymyositis / Scleroderma ⁸ lgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 1,3 | 52 | |
| DIASpot N | KAPDTPMS8N | Polymyositis / Scleroderma ⁸ IgG | - | 24 T | Serum | 10 µL | - | - | > 99% - > 99% | 0,75 | 52 | |
| | | | | R | heumat | oid Fac | tor | | | | | |
| ELISA | RFA096 | EIA RF IgA | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 93,10% | 1,5 37°C | 72 | |
| ELISA | RFG096 | EIA RF IgG | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 94,10% | 1,5 37°C | 72 | |
| ELISA | RFM096 | EIA RF IgM | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-320 U/ml | 95,10% | 1,5 37°C | 72 | |
| | 1 | | | - | Transglu | utamina | se | | | | | |
| ELISA | tTA096 | EIA Transglutaminase IgA | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-200 U/ml | 97,70% | 1,25 37°C | 60 | |
| ELISA | tTG096 | EIA Transglutaminase IgG | HRP | 96 T | Serum, Plasma | 10 | 3 | 5-200 U/ml | 96,20% | 1,25 37°C | 60 | |

BIOGENIC AMINES

Biogenic amine is a chemically imprecise term, which, by convention, includes the catecholamines: **Epinephrine** (or **Adrenaline**), **Norepinephrine** (or **Noradrenaline**) and **Dopamine**, the indoleamine Serotonin, the imidazolamine Histamine and compounds closely related to each of these. They are produced by decarboxylation of amino acids. These biogenic amines play key roles in neurotransmission and other signalling functions.



O CATECHOLAMINES

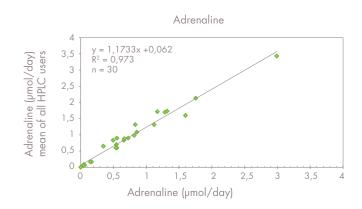
The principal catecholamines are norepinephrine (noradrenaline), epinephrine (adrenaline) and dopamine. These compounds are formed from phenylalanine and tyrosine. Tyrosine is produced in the liver from phenylalanine through the action of phenylalanine hydroxylase. The tyrosine is then transported to catecholamine-secreting neurons where a series of reactions convert it into dopamine, into norepinephrine and finally into epinephrine. The measurement of catecholamines in biological fluids ("biogenic amines") is routinely performed for the diagnosis of biogenic amine-secreting tumors (i.e., pheochromocytoma, neuroblastoma).

Pheochromocytoma, a tumor of the chromafin tissue, is associated with the presence of greatly increased plasma and urinary catecholamine concentrations. Elevated catecholamines have also been found in patients with other tumors of neural tube origin, such as neuroblastomas and ganglioneuroblastomas.

O HISTAMINE

Histamine is the most important mediator in human and is mostly found in the initial phase of anaphylaxis ("immediate type" allergy). Histamine acts predominantly on smooth muscles and blood vessels.

Major effects include widespread arteriolar dilation, local increased capillary permeability by contracting endothelial cells, contraction of nonvascular smooth muscles, bronchoconstriction, chemotaxis for eosinophils, blocking T lymphocyte function and gastric acid secretion.





MELATONIN

The major hormone secreted by the pineal gland - is a key modulator of annual and circadian biorhythms. Its circadian profile in body fluids is an excellent marker for the setting of the endogenous clock. Daytime plasma Melatonin levels are low and rise in the evening (onset). Night-time levels peak at around 03.00 hrs. (acrophase) in most healthy humans. As a general modulator of human biorhythm, Melatonin is involved in the timing of functions such as sleep, mood, reproduction and immune system activity.

O NEPHRINES

Normetanephrine and metanephrine are physiologically formed from the catecholamines noradrenaline and adrenaline by the enzyme catechol-O-methyltransferase (COMT). Increased levels of normetanephrine and metanephrine can be found in patients suffering from pheochromocytoma, ganglio - neuroma and other neurogenic tumors.

O SEROTONIN

Is well established as a neurotransmitter in the central nervous system. Altered concentrations of circulating serotonin have been implicated in several pathologic conditions including chronic tension migraine, schizophrenia, hypertension, Huntington's disease, Duchenne's muscular dystrophy and early acute appendicitis. The determination of serum serotonin levels is of high clinical significance for diagnostic assessment of carcinoid syndrome.

O ASSESSMENT OF BIOGENIC AMINES

The concentrations of catecholamines may be determined in serum, plasma, urine, other body fluids and even cell culture supernatants. The most commonly used methodology is HPLC combined with electrochemical detection. However this methodology is subject to analytical error, when synthetic sympatho-mimetic therapeutic agents, in comparatively high concentrations present, interfere with the quantitative determination of endogenous catecholamines. Peaks arriving from these synthetic agents will mask the biogenic amine peaks, making exact determinations almost impossible.

An alternative and more specific method for the determination of biogenic amines in any type of sample is immuno-assay, whether as radioimmunoassay (RIA) or enzyme immunoassay (ELISA).

These immunoassays correlate very well with the standard HPLC methodology, but have additional advantages:

- No predilution of the sample
- Short assay time
- Easy automation for high sample throughput
- No interference from therapeutic drugs and their metabolites
- High specificity: the only compound measured is the biologically active L-isomer
- Superior sensitivity, even in combination with small sample volume

| | Cat# | Label | | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|----------------------|--------------|----------|----------|----------------|---------------------|-------------------|----------------------------------|----------------------------------|---|------------------------------|--------------------|
| | | ı | ' | 2 (| CAT (Adı | renaline | and Noradre | enaline) | | | |
| ELISA | KAPL10-1500 | HRP | 2 x 96 T | U EP | 10 300 | 2 | see | Adrenaline ELISA | and Noradrenaline ELISA | | - |
| | | | 3 | CAT (A | drenalir | ne, Nord | adrenaline an | d Dopamine |) | | |
| ELISA | KAPL10-1600 | HRP | 3 x 96 T | U EP | 10 300 | 2 | see Adrenali | ne ELISA , Noradro | enaline ELISA and Dopamine E | ELISA | - |
| | | | | 5-H | ydroxy-3 | 3-Indole | Acetic Acid (| 5-HIAA) | | | |
| ELISA | KAPL10-1900 | HRP | 96 T | U | 50 | 2 | 0,17-50 mg/L | 0,17 mg/L | Samples preparation: 0,4 ELISA: 2,5 | 60 | - |
| | | | | | Adr | enaline | (Epinephrine) | | | | |
| ELISA | KAPL10-0100 | HRP | 96 T | U EP | 10 300 | 2 | 0,7-200 ng/mL 18-6667 pg/mL | 0,9 ng/mL 10 pg/mL | Samples preparation: 1,25 ELISA: 3,5 | 60 | - |
| | | | | | | Dop | amine | | | | |
| ELISA | KAPL10-0300 | HRP | 96 T | U EP | 10 300 | 2 | 4.8-2000 ng/mL 75-33333pg/mL | 2,5 ng/mL 49 pg/mL | Samples preparation: 1,25 ELISA: 3,5 | 60 | - |
| | | | | | | Histo | amine | | | | |
| ELISA | KAPL10-1000 | HRP | 96 T | U EP | 10 25 | 2 | 0,3-125 ng/mL 0,12-50 ng/mL | 0,22 ng/mL 0,18 ng/mL | Samples preparation: 1 ELISA: 4 | 60 | - |
| | | | | | | Metar | nephrine | | | | |
| ELISA FT (Plasma) | KAPL10-0700 | HRP | 96 T | HP - EP | 200 | 2 | 15,1-3600 pg/mL | 14,9 pg/mL | Samples preparation: 2,25 ELISA: ON or 3 | 60 | Fast Test assay |
| ELISA FT (Urine) | KAPL10-0500 | HRP | 96 T | U | 25 | 2 | 10,5-2000 ng/mL | 8,6 ng/mL | Samples preparation: 0,75 ELISA: 1 | 60 | Fast Test assay |
| | N | lephrine | es (Meta | nephrine | e ELISA I | FT Plasn | na and Norm | etanephrine | ELISA FT Plasma) | | |
| ELISA FT (Plasma) | KAPL10-1400 | HRP | 2 x 96 T | HP - EP | 200 | 2 | | | ne ELISA FT Plasma hrine ELISA FT Plasma | | Fast Test assay |
| ELISA FT (Urine) | KAPL10-1300 | HRP | 2 x 96 T | U | 25 | 2 | | see Metanephri and Normetanep | ne ELISA FT Plasma bhrine ELISA FT Urine | | Fast Test |
| | | | | | Noradr | enaline | (Norepinephr | ine) | | | |
| ELISA | KAPL10-0200 | HRP | 96 T | U EP | 10 300 | 2 | 2,5-1000 ng/mL 93-33333 pg/mL | 1,7 ng/mL 36 pg/mL | Samples preparation: 1,25 ELISA: 3,5 | 60 | - |
| | | | | | | Normet | anephrine | | | | |
| ELISA FT (Plasma) | KAPL10-0600 | HRP | 96 T | HP - EP | 200 | 2 | 22,8-7200 pg/mL | 17,9 pg/mL | Samples preparation: 2,25 ELISA: ON or 3 | 60 | Fast Test |
| ELISA FT (Urine) | KAPL10-0400 | HRP | 96 T | U | 25 | 2 | 16,2-3000 ng/mL | 14.7 ng/mL | Samples preparation: 0,75 ELISA: 1 | 60 | Fast Test assay |
| | | | | | | Ser | otonin | | | | |
| ELISA HS | KAPL10-5900* | HRP | 96 T | UD - TH | 1 to 100 | 2 | 0,015-2,5 ng/mL | 0,005 ng/mL | Samples preparation: 0,5 ELISA: ON + 1 | 60 | - |
| ELISA FT | KAPL10-0900 | HRP | 96 T | S - U - P | 25 | 2 | 10,2-2500 ng/mL | 6,2 ng/mL | Samples preparation: 0,25 ELISA: 1 | 60 | Fast Test assay |
| | | | | | | | | | 1 | | - |

BONE METABOLISM

Bones are continuously undergoing a dynamic process of resorption and absorption known as **bone metabolism**. Signaling pathways on which bone metabolism relies include the action of several hormones, as **Osteocalcin**, parathyroid hormone (PTH) and Vitamin D.

As Osteocalcin, the major non-collagenous protein of the bone matrix, is manufactured by osteoblasts, it is often used as a biochemical marker, for the bone formation process. A large number of studies indicate that serum-osteocalcin levels reflect very well the rate of bone formation.

The determination of blood levels of Osteocalcin is valuable for:

- The identification of women at risk of developing osteoporosis
- Monitoring bone metabolism in several clinical conditions:
 - during peri- and post menopause
 - during Hormone Replacement Therapy
 - patients with GH deficiency, Renal osteodystrophy

O PARATHYROID HORMONE (PTH), OR PARATHORMONE

Is secreted by the parathyroid glands as a polypeptide containing 84 amino acids and is the major physiological regulator of phosphocalcic metabolism. It acts to increase the concentration of calcium (Ca_{24}) in the blood.

Measurements of PTH is used in:

- Diagnose hyperparathyroidism (elevated levels of intact PTH)
- Differentiation between hypoparathyroidism and hypercalcemia
- It allows documenting the occurrence of secondary hyperparathyroidism in patients with Vitamin D deficiency, intestinal malabsorption, or renal failure.

O AGGRECAN (PG)

Is the predominant proteoglycan species in articular cartilage.

The loss of PG and other matrix components from the cartilage leads to destruction of the tissue, causing complete deterioration of the articular surface. PG and PG fragments released in synovial fluid and serum during this degradation process might serve as markers of the metabolic changes in diseased cartilage.

The DIAsource Aggrecan ELISA assay provides and easy, non-invasive methodology for the quantification of cartilage turnover. It can also be used for the monitoring of the effect of drugs on the cartilage turnover.



O FETUINS

Are blood proteins, which are made in the liver and secreted into the blood stream. They belong to a large group of binding proteins mediating the transport and availability of a wide variety of cargo substances in the blood stream (e.g. Serum Albumin).

Fetuin has the highest capacity in inhibiting soft tissue calcification among all other molecules in the circulation. It is the most important and major calcification regulating protein in the circulation. The function of inhibiting soft tissue calcification is achieved by forming a soluble colloidal microsphere of fetuin-calcium-phosphate complex in the bloodstream.

O OSTEOCALCIN OR BONE GLA PROTEIN (B.G.P)

Is the major non-collagen protein of the bone matrix. It has a molecular weight of 5800Da and contains 49 amino-acids, including 3 residues of gamma carboxyl glutamic acid. Osteocalcin is synthesized in the bone by the osteoblasts. After production, it is partly incorporated in the bone matrix and the rest is found in the blood circulation. The exact physiological function of osteocalcin is still unclear. A large number of studies show that the circulating levels of osteocalcin reflect the rate of bone formation.

O VITAMIN D

Plays an important role in the maintenance of major organ systems: Vitamin D regulates the calcium and phosphorus levels in the blood and inhibits parathyroid hormone secretion from the parathyroid gland. Vitamin D deficiency can result from inadequate intake coupled with inadequate sunlight exposure, conditions that impair conversion of vitamin D into active metabolites, such as liver or kidney disorders, or, rarely, by a number of hereditary disorders. Deficiency results in impaired bone mineralization, and leads to bone softening diseases, rickets in children and osteomalacia in adults, and possibly contributes to osteoporosis. Research has also indicated that vitamin D deficiency is linked to colon cancer and more recently, to breast cancer. Conflicting evidence links vitamin D deficiency to other forms of cancer.

The major form of Vitamin D, 25OH Vitamin D, has a limited biological activity and is converted in the kidney to $1,25(OH)_2$ Vitamin D a more active derivate. The blood levels of $1,25(OH)_2$ D being 100 to 1000 less than 25OH D, it requires extraction and separation steps prior to measurement.

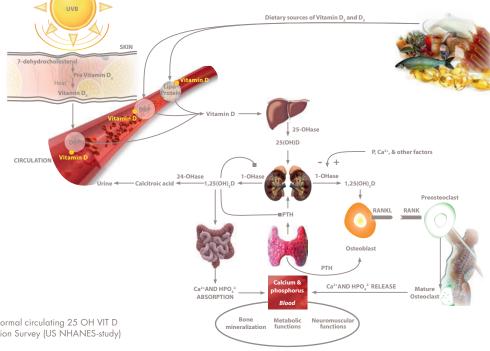
Free 25OH Vitamin D represents the tiny fraction that circulates as the free form. It is considered to be a better biomarker than 25OH Vitamin D in some conditions.

O PHYSIOLOGY OF VITAMIN D

| Patient status | ng/mL of 25(OH) Vit D* |
|---------------------|---------------------------|
| Vit D Deficiency | < 10 |
| Vit D Insufficiency | 10 - 30 |
| Vit D Sufficiency | > 30 - 100 |
| Risk for Toxicity | > 100 |

Vitamin D related diseases:

- Rickets in Children
- Osteoporosis, Osteomalacia
- Cancer
- Type II Diabetes
- Auto Immune Diseases
- Parkinson's disease



^{*}Based on a vast majority of clinical studies to define normal circulating 25 OH VIT D levels e.g. US National health and Nutrition Examination Survey (US NHANES-study)

| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks | |
|---------------------------------|------------|-------|------|----------------|---------------------|-------------------|------------------------|--------------------------------|-----------------------|------------------------------|--------------|--|
| | | | | | | Aggreco | an (PG) | | | | | |
| ELISA | KAP1461 | HRP | 96 T | SF - S | 50 | 3 | 10-250 ng/mL | 0,9 ng/mL | 3,25 | 60 | - | |
| | | | | | | Fetu | Jin | | | | | |
| ELISA | KAPEPKT800 | HRP | 96 T | S | 10 | 2 | 12,5-370 ng/mL | 5 ng/mL | 3 | 60 | - | |
| | | | | | | Osteo | calcin | | | | | |
| ELISA | KAP1381 | HRP | 96 T | S | 25 | 2 | 1,56-75 ng/mL | 0,08 ng/mL | 2,5 | 60 | - | |
| | | | | ln | tact Par | aThyroic | Hormone (P | TH) | | | | |
| ELISA | KAP1481 | HRP | 96 T | S - P | 200 | 2 | 22-1400 pg/mL | 2 pg/mL | 3,5 | 60 | - | |
| 1,25(OH) ₂ Vitamin D | | | | | | | | | | | | |
| ELISA | KAP1921 | HRP | 96 T | S | 500 | 2 | 3-180 pg/mL | 0,8 pg/ml | 19 | 52 | - | |
| ELISA | 3019700 | | | | | set includin | g solvents for 2 kits | of 1,25(OH) ₂ Vitam | in D | | | |
| ELISA | 4300604 | | | | | shaker | for extraction (IKA | Vibrax 1200 RPM) | | | | |
| ELISA | 4300605 | | | | | suppor | t rack for tubes (to b | e used with shaker) | | | | |
| ELISA | 1102496 | | | | extro | a cartridges | for extraction in sin | gle (1 bag of 42 ca | rtridges) | | | |
| | | | | | 250 | OH Vitar | min D Total | | | | | |
| ELISA | KAP1971 | HRP | 96 T | S | 50 | 2 | 5,3-133 ng/mL | 2,8 ng/mL | 2,75 | 130 | - | |
| ELISA | KAP1971-F1 | HRP | 96 T | S - P | 25 | 2 | 4,9-105 ng/mL | 4,12 ng/mL | 1,5 | 104 | Fast version | |
| | | | | | Free 2 | 5OH Vi | tamin D Total | | | | | |
| ELISA | KAPF1991 | HRP | 96 T | S | 10 | 2 | 0,9-40,3 pg/mL | 2,4 pg/mL | 2,75 | 52 | - | |
| | | | | | RAT 2 | 5OH Vi | tamin D Total | | | | | |
| ELISA (Rat) | KRR1971 | HRP | 96 T | S | 50 | On request | 0-135 ng/mL | 2,8 ng/mL | 2,75 | 130 | - | |

CANCER MARKERS

Serum tumor markers is a term commonly used to refer to molecules that can be detected in a blood sample by immunochemical methods. Tumor markers are produced either by the tumor (cancer) itself or by the body in response to the presence of cancer or certain non-cancerous (benign) conditions.

MEASUREMENTS OF TUMOR MARKER LEVELS BY SERUM MARKERS CAN BE USEFUL IN FOLLOWING CLINICAL SETTINGS

Diagnosis

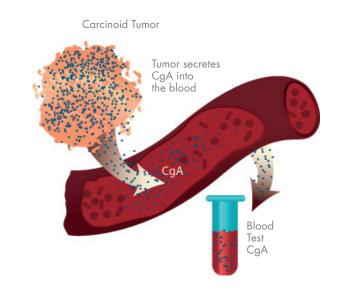
Serum tumor markers can, when used along with X-rays or other tests, aid in diagnosis of some types of cancer. They also can aid in locating the source of cancers that have metastasized.

Monitoring for recurrence of tumor

After successful treatment of a cancer patient, tumor marker(s) are regularly tested to indicate whether there is a recurrence of the cancer.

Prognosis and staging

Serum tumor markers can be used as aid in the tumor volume estimation, as a helpful tool to indicate tumor progression, or as indicator of metastasis involvement.



Detection of residual disease

After surgery of a specific cancer, serum tumor markers can be used to indicate whether the entire tumor burden has been successfully removed.

Monitoring treatment

Serum tumor markers can be used as tool to assess the outcome of a treatment by monitoring a patient's response to a specific or various treatment regimens. In general, serum marker levels will drop if treatment is beneficial and will remain elevated or increased when treatment is not effective. Currently, the main use of tumor markers is to assess a cancer's response to treatment and to check for recurrence.



| Cancer marker | Clinical use |
|---|--|
| AFP (Alpha-Fetoprotein) | Testicular Cancer, Ovarian cancer, Malignant teratoma |
| CA 125 | Ovarian cancer, Endometrial cancer |
| CA 15-3 | Breast cancer |
| CA 19-9 | Pancreatic cancer, Colorectal |
| CEA (Carcino Embryonic Antigen) | Colorectal, lung and breast cancers |
| CgA (Chromogranin A) | Small - Cell Lung Carcinoma (SCLC) Tumors of neuroendocrine origin |
| CT us (Calcitonin Ultra sensitive) | Medullary Thyroid carcinoma (MTC) |
| Gastrin | Gastrin producing tumors |
| Beta-hCG (Free beta human Chorionic Gonadotropin) | Throphoblastic and testicular cancers |
| NSE (Neuron Specific Enolase) | Medullary thyroid carcinoma Pancreatic islet cell cancer Small Cell Lung Cancer (SCLC) |
| Small Cell Lung Cancer (SCLC) | Tg-S (Thyroglobuline) Thyroid cancer |

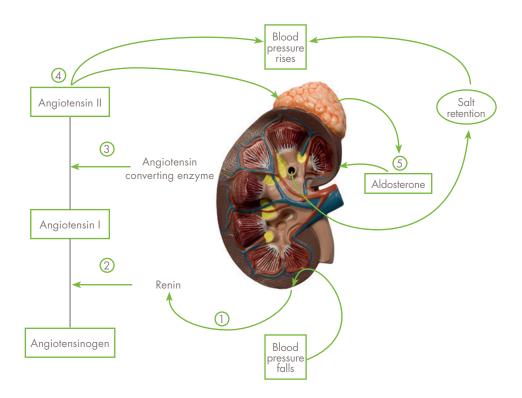
| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks | | |
|--------|------------------------------------|-------|------|----------------|---------------------|-------------------|---------------|-------------|-----------------------|------------------------------|----------------------------------|--|--|
| | Alpha-Fetoprotein (AFP) | | | | | | | | | | | | |
| ELISA | KAPD1468 | HRP | 96 T | S | 25 | 0 | 10-160 IU/mL | 1,78 IU/mL | 0,7 | 60 | - | | |
| | Calcitonin Ultra Sensitive (CT US) | | | | | | | | | | | | |
| ELISA | KAP0421 | HRP | 96 T | S | 100 | 2 | 10-400 pg/mL | 0,7 pg/mL | 18,5 | 60 | 1 pg = 0,19 μIU 2nd IS 89/620 | | |
| | | | | | Chro | mograr | nin A (CgA) | | | | | | |
| ELISA | KAPEPKT812 | HRP | 96 T | S | 25 | 2 | 31-830 ng/mL | 5 ng/mL | 3,5 | 60 | | | |
| ELISA | CGA | HRP | 96 T | S - P | 50 | 2 | 36-1800 ng/ml | 2,28 ng/ml | 1,45 | | - | | |

CARDIOVASCULAR & SALT BALANCE

THE RENIN-ANGIOTENSIN SYSTEM (RAS) OR THE RENIN-ANGIOTENSIN-ALDOSTERONE SYSTEM (RAAS)

(RAAS) is a hormone system that regulates blood pressure and water (fluid) balance. Renin activates the renin-angiotensin system by cleaving angiotensinogen, produced by the liver, to yield angiotensin I, which is further converted into Angiotensin II by ACE (Angiotension Converting Enzyme). Most important site for Renin release is the kidney.

Angiotensin also stimulates the secretion of the hormone Aldosterone from the adrenal cortex. Aldosterone causes the tubules of the kidneys to retain sodium and water. This increases the volume of fluid in the body, which also increases blood pressure. If the renin-angiotensin-aldosterone system is too active, blood pressure will be too high. Angiotensin II also stimulates the release of vasopressin (antidiuretic hormone, ADH) from the pituitary which acts upon the kidneys to increase fluid retention.



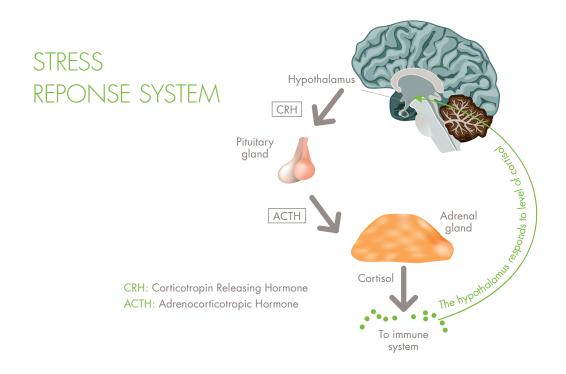


O CORTISOL

Is the most abundant circulating steroid and the major glucocorticoid secreted by the adrenal cortex. Cortisol is physiologically effective in blood pressure maintenance and anti-inflammatory activity. It is also involved in calcium absorption, gluconeogenesis as well as in the secretion of gastric acid and pepsin.

It is increased under stress situations, physical exercise and external administration of ACTH. Measurement of cortisol levels in general, can be used as an indicator of adrenal function and differential diagnosis of Addison's and Cushing's diseases as well as adrenal hyperplasia and carcinoma.

Most circulating cortisol is bound to cortisol binding globulin or transcortin and albumin. The free cortisol, which is considered to be the active part of blood, is about 1 - 2%. In the absence of appreciable amounts of the cortisol binding proteins in saliva, salivary cortisol is considered to be free and shows a diurnal rhythm with the highest levels in the morning and the lowest levels at night.



| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|--------|-----------|-------|-------|----------------|---------------------|-------------------|-----------------|-------------|-----------------------|------------------------------|------------------------------------|
| | | | | | | Aldost | erone | | | | |
| ELISA | KAPDB450 | HRP | 96 T | S - P - U | 50 | 2 | 15-1000 pg/mL | 9,1 pg/mL | 1,25 | 48 | |
| | | | | | | Cort | isol | | | | |
| ELISA | KAPDB270 | HRP | 96 T | S | 20 | 1 | 0,5-60 µg/dL | 0,4 µg/dL | 1 | 48 | |
| ELISA | KAPDB290 | HRP | 96 T | Sa | 50 | 1 | 1-100 ng/mL | 1 ng/mL | 1 | 48 | For salivary samples |
| | | | | | | HS (| CRP | | | | |
| ELISA | KAPDB4360 | HRP | 96 T | S | 20 | 1 | 100-10000 ng/mL | 10 ng/mL | 1 | 48 | |
| | | | | | | Renin I | Direct | | | | |
| ELISA | KAP1531 | HRP | 96 T | EP | 200 | 2 | 4-270 pg/mL | 0,8 pg/mL | 2,5 | 48 | 1 pg = 2,2 μIU of NIBSC 68//356 |
| | | | | | Ren | in Plasm | na Activity | | | | |
| ELISA | KAPDB4600 | HRP | 192 T | Р | 500 | 2 | 0,2-60 ng/mL | 0,14 ng/mL | 1,5 + 1,75 | 48 | |

DIABETES & METABOLISM

O DIABETES MELLITUS

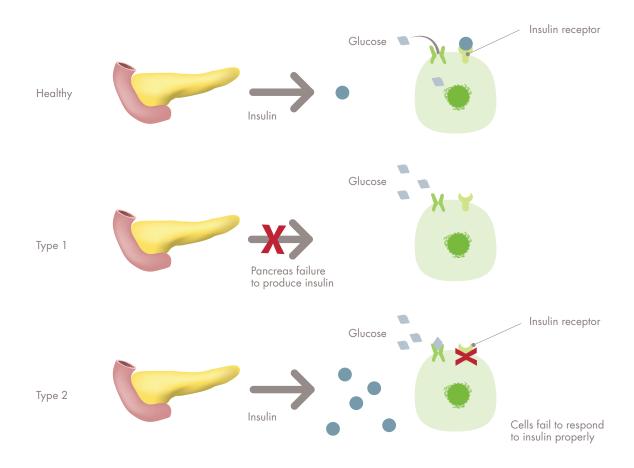
Is a disorder of carbohydrate metabolism. It is a disease characterized by persistent hyper-glycemia (high blood sugar levels). It is a metabolic disease that requires medical diagnosis, treatment and lifestyle changes.

There are three main forms of diabetes: Type 1, Type 2 and gestational diabetes (or Type 3, occurring during pregnancy), although these three "types" of diabetes are more accurately considered patterns of pancreatic failure rather than single diseases.

- Type 1 is due to autoimmune destruction of the insulin-producing cells
- Type 2 and gestational diabetes are due to insulin resistance by tissues

Type 2 may progress to destruction of the insulin producing cells of the pancreas, but is still considered Type 2, even though insulin administration may be required..

Since insulin is the principal hormone that regulates uptake of glucose into most cells from the blood (primarily muscle and fat cells, but not central nervous system cells), deficiency of insulin or the insensitivity of its receptors plays a central role in all forms of diabetes mellitus. Diabetes is a chronic disease, and emphasis is on managing short-term as well as long-term diabetes-related problems. There is an important role for patient education, nutritional support, self glucose monitoring, as well as long-term glycemic control.

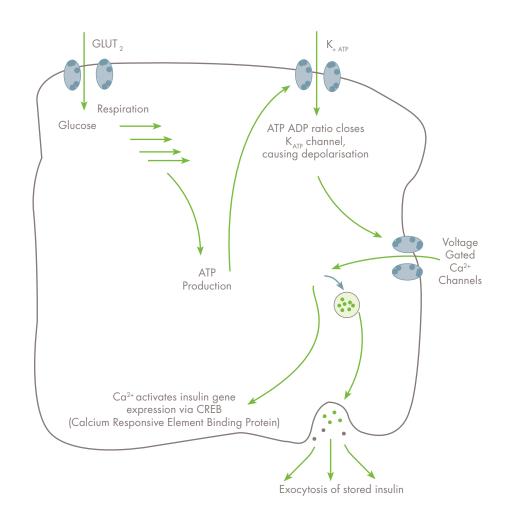




OBESITY

Obesity is a condition in which the natural energy reserve, stored in the fatty tissue of humans and mammals, is increased to a point where it is a risk factor for certain health conditions or increased mortality.

Obesity develops from the interaction of individual biology and the environment. Excessive body weight has been shown to correlate with various diseases, particularly cardiovascular disease, diabetes mellitus Type 2, sleep apnea, and osteoarthritis. Obesity is both an individual clinical condition and is increasingly viewed as a serious public health problem.



| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|-------------------|----------|-------|------|----------------|---------------------|-------------------|------------------|--------------|-----------------------|------------------------------|---|
| | | | | | | Adipo | nectin | | | | |
| ELISA | KAPME09 | HRP | 96 T | S - P | 10 | 2 | 2-100 ng/mL | < 0,27 ng/mL | 1,75 | 60 | - |
| | | | | | C | -Peptide | e (C-PEP) | | | | |
| ELISA | KAP0401 | HRP | 96 T | S | 100 | 2 | 0,05-4,9 pmol/mL | 0,01 pmol/mL | 2,5 | 32 | 1 ng = 1 ng of NIBSC 84/510 |
| | | | | | , | Insulin | (INS) | | | | |
| ELISA | KAP1251 | HRP | 96 T | S | 50 | 2 | 5-250 μIU/mL | 0,17 µIU/mL | 0,75 | 60 | 1 µIU = 1 µIU 2nd IRP 66/304 |
| | | | | | | Lep | tin | | | | |
| ELISA | KAP2281 | HRP | 96 T | S | 50 | 2 | 0,5-60 ng/mL | 0,04 ng/mL | 2,5 | 60 | 1 ng = 1 ng of NIBSC 97/594 |
| ELISA (Ms/Rat) | KAPME06* | HRP | 96 T | S - P | 10 | 1 | 25-1600 pg/mL | 10 pg/mL | 3 | 60 | - |
| | | | | | | ProIn | sulin | | | | |
| ELISA | E-BX-96 | HRP | 96 T | S - P | 100 | 2 | 2,5-100 pmol/L | 0,6 pmol/L | 1,75 | 60 | not distributed in Belgium and Germany |
| | | | | | | Resi | stin | | | | |
| ELISA | KAPME50 | HRP | 96 T | S - P | 10 | 2 | 20-1000 pg/mL | 12 pg/mL | 4 | 60 | - |

^{*}For Research Use Only

FERTILITY

In order to understand the causes of infertility and the role modern infertility treatment plays in assisting conception, it is useful to look at the natural process - a woman's ovulatory cycle and the production of sperm in the male - and the hormones that play a major role in those processes.

The gonadotropins are hormones that primarily affect the ovaries and the testes. They regulate the development and hormonesecreting functions of these organs

Three gonadotropins are essential to reproduction: human follicle stimulating hormone (hFSH), human luteinizing hormone (hLH) and human chorionic gonadotropin (hCG). FSH and LH are secreted by the pituitary gland situated beneath the brain. Their secretion is controlled by another hormone, the gonadotropin-releasing hormone (GnRH) produced by the hypothalamus. hCG is primarily produced by the placenta following successful implantation, and plays a role in maintaining pregnancy.

Androgen is the generic term for any natural or synthetic compound, usually a steroid hormone, that stimulates or controls the development and maintenance of masculine characteristics in vertebrates by binding to androgen receptors. This includes the activity of the accessory male sex organs and development of male secondary sex characteristics. Androgens, which were first discovered in 1936, are also called androgenic hormones or testoids. Androgens are also the original anabolic steroids. They are also the precursor of all estrogens, the female sex hormones. The primary and most well-known androgen is testosterone.

A subset of androgens, adrenal androgens, includes any of the 19-carbon steroids synthesized by the adrenal cortex, the outer portion of the adrenal gland (zonula reticularis - innermost region of the adrenal cortex), that function as weak steroids or steroid precursors, including dehydroepiandrosterone (DHEA), dehydroepiandrosterone sulfate (DHEA-S), and androstenedione.

O DEHYDROEPIANDROSTERONE (DHEA)

A steroid hormone produced in the adrenal cortex from cholesterol. It is the primary precursor of natural estrogens.

O ANDROSTENEDIONE

Anandrogenic steroid produced by the testes, adrenal cortex, and ovaries. While androstenediones are converted metabolically to testosterone and other androgens, they are also the parent structure of estrone.



O ANDROSTENEDIOL AND ANDROSTANEDIOLGLUCURONIDE

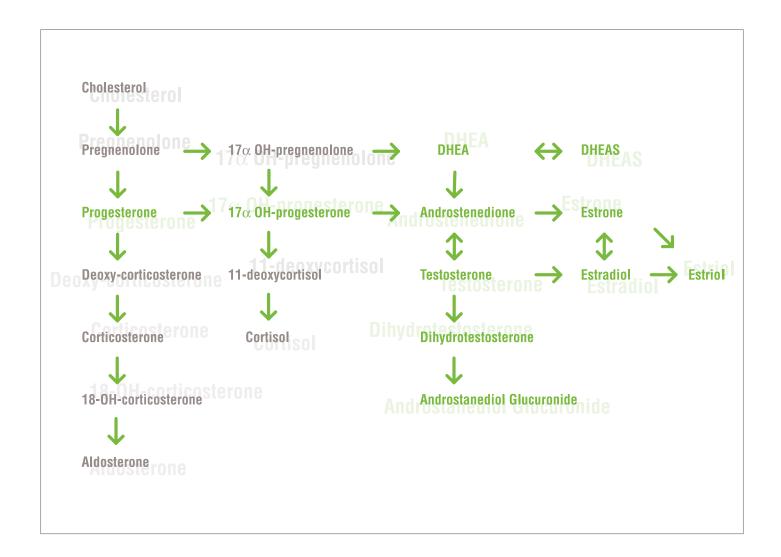
Steroid metabolites that are thought to act as the main regulators of gonadotropin secretion.

ANDROSTERONE

A chemical by-product created during the breakdown of androgens, or derived from progesterone, that also exerts minor masculinising effects, but with one-seventh the intensity of testosterone. It is found in approximately equal amounts in the plasma and urine of both males and females.

O DIHYDROTESTOSTERONE (DHT)

A metabolite of testosterone, and a more potent androgens than testosterone that binds more strongly to androgen receptors. It is produced in the adrenal cortex.



| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|------------------------------|---|-------|------|----------------|---------------------|-------------------|----------------|-------------|-----------------------|------------------------------|---------|
| | | | • | | Andros | tane Dic | ol Glucuronide | е | | | |
| ELISA | KAPDB460 | HRP | 96 T | S | 50 | 2 | 0,25-50 ng/mL | 0,1 ng/mL | 0,75 | 48 | - |
| | | | | | Δ | ndroste | nedione | | | | |
| ELISA | KAPD3265 | HRP | 96 T | S - EP | 20 | 2 | 0,1-10 ng/mL | 0,021 ng/mL | 1,5 | 60 | - |
| Chorionic Gonadotropin (hCG) | | | | | | | | | | | |
| ELISA | KAPD1469 | HRP | 96 T | S - P | 25 | 0 | 5-1000 mIU/mL | < 5 mIU/mL | 0,6 | 48 | - |
| | Dehydroepiandrosterone (DHEA) | | | | | | | | | | |
| ELISA | KAPDB490 | HRP | 96 T | S | 25 | 2 | 0,2-40 ng/mL | 0,15 ng/mL | 1,25 | 60 | - |
| | Dehydroepiandrosterone - Sulfate (DHEA-S) | | | | | | | | | | |
| ELISA | KAPD1562 | HRP | 96 T | S - P | 25 | 0 | 0,1-10 μg/mL | 0,044 µg/mL | 1,25 | 60 | - |
| | | | | | Es | tradiol, | 17β (E2) | | | | |
| ELISA | KAP0621 | HRP | 96 T | S - P | 50 | 2 | 13-935 pg/mL | 5 pg/mL | 2,5 | 60 | - |
| Estriol Free (E3) | | | | | | | | | | | |
| ELISA | KAPD1612 | HRP | 96 T | S | 10 | 2 | 0,3-40 ng/mL | 0,075 ng/mL | 1,5 | 60 | - |
| | | | | | | Estrone | e (E1) | | | | |
| ELISA | KAPDB420 | HRP | 96 T | S | 50 | 2 | 15-2000 pg/mL | 3 pg/mL | 1,25 | 60 | - |
| | | | | Fo | ollicle Sti | mulating | Hormone (F | SH) | | | |
| ELISA | KAPD1288 | HRP | 96 T | S | 25 | 0 | 5-100 mIU/mL | 0,86 mIU/mL | 0,6 | 48 | - |
| | | | | Free β | Chorion | ic Gona | dotropin (βhC | CG, Free) | | | |
| ELISA | EIA4718 | HRP | 96 T | S - EP | 50 | 0 | 10-200 ng/mL | 0,2 ng/mL | 1,3 | 48 | - |
| | | | | ŀ | Human F | lacenta | Lactogen (hl | PL) | | | |
| ELISA | KAPD1283 | HRP | 96 T | S | 10 | 2 | 1,25-20 mg/L | 0,043 mg/L | 0,6 | 48 | - |
| | | | | ı | Luteir | izing H | ormone (LH) | , | | , | |
| ELISA | KAPD1289 | HRP | 96 T | S | 25 | 0 | 10-200 mIU/mL | 1,27 mIU/mL | 0,6 | 48 | - |
| | | | | ı | | Pregner | nolone | , | | , | |
| ELISA | KAPDB4500 | HRP | 96 T | S | 50 | 1 | 0,1-25,6 ng/mL | 0,054 ng/mL | 1,75 | 48 | - |
| | | | ı | I | Pro | gesteror | ne (PROG) | , | | | |
| ELISA | KAPD1561 | HRP | 96 T | S - P | 25 | 0 | 0,3-40 ng/mL | 0,045 ng/mL | 1,25 | 60 | - |

| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|---------------------------------------|----------------|-------|------|----------------|---------------------|-------------------|---------------|-------------|-----------------------|------------------------------|---------|
| 17α-Hydroxyprogesterone (17α-OH-PROG) | | | | | | | | | | | |
| ELISA | KAP14011 | HRP | 96 T | S - EP - HP | 25 | 2 | 0,08-15 ng/mL | 0,04 ng/mL | 1,5 | 96 | - |
| ELISA | KAPD1292 | HRP | 96 T | S - P | 25 | 2 | 0,15-20 ng/mL | 0,034 ng/mL | 1,5 | 48 | - |
| Prolactin (PRL) | | | | | | | | | | | |
| ELISA | KAPD1291 | HRP | 96 T | S | 25 | 0 | 5-200 ng/mL | 0,35 ng/mL | 0,6 | 48 | - |
| Sex Hormone Binding Globulin (SHBG) | | | | | | | | | | | |
| ELISA | KAPD2996 | HRP | 96 T | S - P | 10 | 2 | 4-260 nmol/L | 0,23 nmol/L | 2,5 | 60 | - |
| | Sperm-Antibody | | | | | | | | | | |
| ELISA | KAPD1826 | HRP | 96 T | S | 5 | 1 | 31-250 U/mL | - | 2,5 | 48 | - |
| | | | | | | Testost | erone | | | | |
| ELISA | KAPD1559 | HRP | 96 T | S - P | 25 | 0 | 0,2-16 ng/mL | 0,083 ng/mL | 1,25 | 60 | - |
| | | | | Т | estoster | one, 5 o | ι Dihydro (DH | IT) | | | |
| ELISA | KAPDB280 | HRP | 96 T | S | 50 | 2 | 25-2500 pg/mL | 6 pg/mL | 1,25 | 60 | - |
| | | | | | Te | estostero | ne, Free | | | | |
| ELISA | KAPDB260 | HRP | 96 T | S | 25 | 2 | 0,1-60 pg/mL | 0,018 pg/mL | 1,25 | 60 | - |

GASTROINTESTINAL METABOLISM

- PEPSINGEN 1 & II are serological markers of gastric atrophy and a new screening tool for gastric cancer. Pepsinogen consist of a single polypeptide chain of 375 amino acids with an average MW of 42kD protein.
- PEPSINOGEN I (PGI) is mainly secreted by the chief cells of corpus stomach mucosa (mucosa: Innermost layer where the stomach acid and digestive juices are made).
- PEPSINGEN II (PGII) is secreted from glands covering the whole stomach mucosa.

Together with determination of Gastrin-17, determination of Pepsinogen I & II, it is possible to get information to support the diagnosis of:

- Healthy stomach mucosa
- Functional and organic dyspepsia (when GastroPanel results indicate a healthy stomach mucosa, the cause of stomach problems is often functional dyspepsia or a disease outside the stomach).
- Atrophic gastritis (damaged stomach mucosa that is severely dysfunctional) and likelihoods of the conditions specifically in the corpus and antrum areas of the stomach (normal, gastritis or atrophic gastritis).
- Helicobacter pylori infection
- Acidity of the stomach.

O HELICOBACTER PYLORI

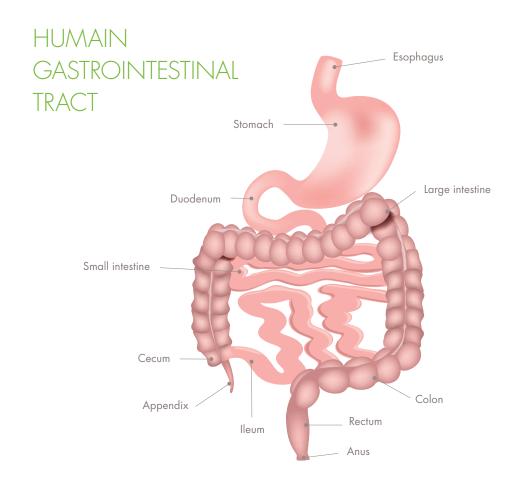
The bacterium Helicobacter pylori plays a significant role in the pathologies of chronic gastritis, peptic ulcer and gastric cancer. Serological testing represents a useful non-invasive alternative.

O CALPROTECTIN

Plasma Calprotectin concentrations are increased in various inflammatory conditions. This test allows a clear differentiation between Irritable Bowel Syndrom and chronic Inflammatory Bowel Disease.



| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks | |
|----------------------------|---------------|-------|------|----------------|---------------------|-------------------|---------------|-------------|-----------------------|------------------------------|---------|--|
| | Calprotectin | | | | | | | | | | | |
| ELISA | KAPEPKT849(1) | HRP | 96 T | F | 50 | 3 | 25-321 µg/g | 2,5 ng/mL | 2 | 60 | - | |
| Helicobacter Pylori | | | | | | | | | | | | |
| Helicobacter pylori IgA | HMA096 | | | | | QUANTI | | | | | | |
| Helicobacter pylori IgM | HMM096 | HRP | 96 T | S - P | 10 | QUALI | - | - | 1,25 | 60 | - | |
| Helicobacter pylori IgG | HMG096 | | | | | QUANTI | | | | | | |
| | | | | | | Pepsino | ogen I | | | | | |
| ELISA | KAPEPKT810 | HRP | 96 T | S | 25 | 2 | 3-300 ng/mL | 0,5 ng/mL | 1,25 | 60 | - | |
| | Pepsinogen II | | | | | | | | | | | |
| ELISA | KAPEPKT811 | HRP | 96 T | S | 50 | 2 | 6,3-100 ng/mL | 0,5 ng/mL | 2,25 | 60 | - | |



GROVVTH FACTORS

O GROWTH HORMONE (GH OR SOMATOTROPIN)

Is a polypeptide hormone synthesised and secreted by the anterior pituitary gland which stimulates growth and cell reproduction in humans and other vertebrate animals.

The diseases resulting of GH excess are pituitary tumor, muscle weakness, insulin resistance or even a rare form of type 2 diabetes, and reduced sexual function. GH deficiency produces growth failure and short stature in children while in adults, may include deficiencies of strength, energy, and bone mass, as well as increased cardiovascular risk.

THE INSULIN-LIKE GROWTH FACTORS (IGFs)

Are polypeptides with high sequence similarity to insulin. IGFs are part of a complex system that cells use to communicate with their physiologic environment. This complex system (often referred to as the IGF "axis") consists of two cell-surface receptors (IGF1R and IGF2R), two ligands (IGF-I and IGF-II), a family of six high-affinity IGF binding proteins (IGFBP 1-6), as well as associated IGFBP degrading enzymes, referred to collectively as proteases.

IGF-1 and IGF-II are regulated by a family of proteins known as the IGF-Binding Proteins.

These proteins help to modulate IGF action in complex ways that involve both inhibiting IGF action by preventing binding to the IGF-1 receptor as well as promoting IGF action possibly through aiding in delivery to the receptor and increasing IGF half-life.

O SOMATOSTATIN

Is a hormone comprising two peptides, one built of 14 amino acids, the other of 28 amino acids. Somatostatin is secreted not only by cells of the hypothalamus but also by delta cells of stomach, intestine, and pancreas. It binds to somatostatin receptors. It is classified as an inhibitory hormone whose main action is to inhibit the release of growth hormone.



10 INSULIN-LIKE GROWTH FACTOR BINDING PROTEINS (IGFBP)

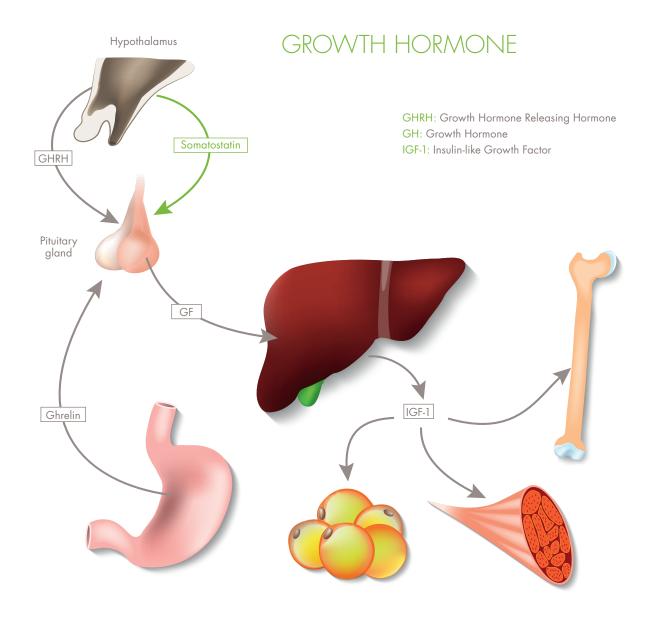
Group of vertebrate secreted proteins, which bind to IGF-I and IGF-II with high affinity and modulate the biological actions of IGFs. The IGFBP family has six distinct subgroups, IGFBP-1 through 6, based on conservation of gene (intron-exon) organization, structural similarity, and binding affinity for IGFs.

IGFBP-3

Forms a ternary complex with insulin-like growth factor acid-labile subunit (IGFALS) and either insulin-like growth factor (IGF) I or II. In this form, it circulates in the plasma, prolonging the half-life of IGFs and altering their interaction with cell surface receptors. A single IGFBP-3 determination is an excellent screening parameter for GHD. IGFBP-3 is a good parameter for monitoring the therapeutic efficacy in both GHD an acromegaly.

The IGFBP-2 concentration is age-dependent in blood

Normal values for healthy individuals (1.5 to > 70 years) were evaluated for this assay. Supplementary parameter to IGFBP-3 in the diagnosis of growth disorders (IGFBP-2/IGFBP-3 ratio), IGFBP-2 is an inhibitor of growth hormone action. Progression-dependent tumor marker in leukaemia, astrocystic CNS tumors, prostate, suprarenal cortex-, hepatocellular and other carcinomas. Anti-aging parameter: IGFBP-2 as a marker of physiological functionality.



| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks | |
|--|--------------------------|-------|------|--------------------------|---------------------|-------------------|-----------------|-------------|-----------------------|------------------------------|----------------------------------|--|
| | Acid Labil Subunit (ALS) | | | | | | | | | | | |
| ELISA | KAPME35* | HRP | 96 T | S - P | 10 | 2 | 7,5-200 ng/mL | 0,53 ng/mL | 3 | 48 | - | |
| Human Growth Hormone (hGH) | | | | | | | | | | | | |
| ELISA | KAP1081 | HRP | 96 T | S - P | 50 | 2 | 0,45-98 μIU/mL | 0,17 μIU/mL | 1 | 60 | 1 µIU = 1 µIU of NIBSC 98/574 | |
| Insulin Growth Factor-1 or Somatomedin C (IGF-1 or SM-C) | | | | | | | | | | | | |
| ELISA | KAP1581 | HRP | 96 T | S | 100 | 2 | 15-774 ng/mL | 4,5 ng/mL | 2 | 60 | 1 ng = 1 ng of NIBSC 02/254 | |
| | | | lr | nsulin Gı | rowth Fa | actor Bin | ding Protein- | (IGFBP-1) | | | | |
| ELISA | KAPME01 | HRP | 96 T | S - P - AF | 20 | 2 | 0,1-8 ng/mL | 0,055 ng/mL | 1,75 | 60 | - | |
| | | | lr | nsulin Gr | owth Fa | ıctor Bin | ding Protein-2 | 2 (IGFBP-2) | | | | |
| ELISA | KAPME05 | HRP | 96 T | S - P - AF - CSF - SA | 10 | 2 | 2-80 ng/mL | 0,2 ng/mL | 1,75 | 60 | - | |
| ELISA (Mouse) | KAPME08* | HRP | 96 T | S | 10 | 1 | 0,125-8 ng/mL | 0,04 ng/mL | 3 | 60 | - | |
| | | | lr | nsulin Gr | owth Fa | ctor Bin | ding Protein-3 | 3 (IGFBP-3) | | | | |
| ELISA | KAP1171 | HRP | 96 T | S | 10 | 2 | 460-16070 ng/mL | 10 ng/mL | 2,5 | 60 | - | |

IMMUNOLOGY MARKERS

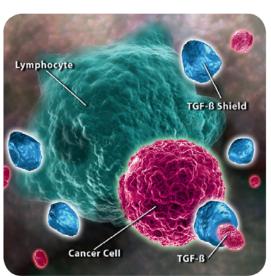
Clinical studies show that many cytokines play a crucial role in cancer, infectious diseases, allergy, inflammatory, autoimmune diseases and graft rejection. Measurements of cytokine levels are useful for understanding pathogenesis and as diagnostic and prognostic indicators. Cytokines may be pleiotropic (one cytokine, multiple effects), redundant (multiple cytokines, one effect) and antagonistic (one cytokine inhibits another cytokine).

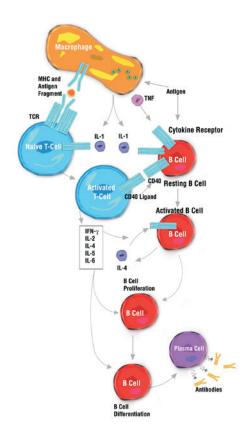
Cytokine actions may be grouped into five broad areas:

- Development of cellular and humoral immune responses
- Induction of inflammation
- Regulation of hematopoiesis
- Control of cellular proliferation and differentiation
- Induction of wound healing (cicatrization)

There are four major families of cell adhesion molecules:

- Immunoglobulin (Ig) superfamily Cell Adhesion Molecules(CAMs)
- Integrins
- Cadherins
- Selectins





APOPTOSIS PATHWAY

Apoptosis is a programmed cells death(PCD) during which cells activate intrinsic mechanisms leading to self destruction. It plays an important role in cell development, homeostasis, and immunity. Apoptosis is very important in the study of disease states such as cancer, liver cirrhrosis, AIDS, and many other diseases.

O CELL SURFACE ANTIGENS

Both T and B cells have surface antigens that are characteristic of different stages in their life cycle, and antibodies have been prepared to identify the antigens. Knowledge of the specific type and stage of maturation of the tumour cells helps physicians to determine the prognosis and course of treatment for the patient.



O HEMATOPOIESIS/DIFFERENTIATION

Hematopoiesis is the process by which all the different cell lineages that form the blood and immune system are generated from a common pluripotent stem cell. During the life of an individual, two separate hematopoietic systems exist, both arising during embryonic development but only one persisting in the adult.

INFLAMMATION

Is the complex biological response of vascular tissues to pathogens, damaged cells, or irritants. It is a protective attempt developped by the organism to remove the injurious stimuli as well as initiate the healing process for the tissue. A cascade of biochemical events propagates and matures the inflammatory response, involving the local vascular system, the immune system, and various cells within the injured tissue. Many cytokines play a key role in the inflammatory process.

OINTERFFRONS

Is a pleiotropic cytokine which is produced primarily by stimulated macrophages. Its role in directing development of a Th1 type immune response from naive T-cells demonstrates its critical role in regulation of the immune response and strongly suggests its potential usefulness in cancer therapy.

| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range Sensitivity | | Incubation (hours) | Max shelf life (weeks) | Remarks | |
|------------------------------|--------------------------------------|-------|------|----------------|---------------------|-------------------|-------------------|------------|-----------------------|------------------------------|-----------------------------------|--|
| | IFN-γ (Interferon-gamma) | | | | | | | | | | | |
| ELISA | KAP1231 | HRP | 96 T | S - P | 50 | 2 | 1-30 IU/mL | 0,03 IU/mL | 2,25 | 60 | 1 IU = 1IU of NIBSC 87/586 | |
| IL-1 β (Interleukine-1 beta) | | | | | | | | | | | | |
| ELISA | KAP1211 | HRP | 96 T | S - P | 200 | 2 | 24-1166 pg/mL | 0,35 pg/mL | 2,25 | 60 | 1 pg = 100 mIU of NIBSC 86/680 | |
| IL-6 (Interleukine-6) | | | | | | | | | | | | |
| ELISA | KAP1261 | HRP | 96 T | S | 100 | 2 | 23-2560 pg/mL | 2 pg/mL | 2,25 | 144 | 1 pg = 100 mIU of NIBSC 89/548 | |
| | | | | | IL- | 8 (Interl | eukine-8) | | | | | |
| ELISA | KAP1301 | HRP | 96 T | EP | 100 | 2 | 40- 1845 pg/mL | 1,1 pg/mL | 2,25 | 60 | 1 pg = 1 mU of NIBSC 89/520 | |
| | | | | | IL-1 | 0 (Interl | eukine-10) | | | | | |
| ELISA | KAP1321 | HRP | 96 T | S | 100 | 2 | 21-1976 pg/mL | 1,6 pg/mL | 4,25 | 60 | 1 pg = 5 mIU of NIBSC 93/722 | |
| | TNF-a (Tumor Necrosing Factor-alpha) | | | | | | | | | | | |
| ELISA | KAP1751 | HRP | 96 T | S | 200 | 2 | 7-518 pg/mL | 0,7 pg/mL | 4,25 | 60 | 1pg = 40 mIU of NIBSC 87/650 | |

INFECTIOUS DISEASES

An **infectious disease** is a clinically evident disease resulting from the presence of pathogenic microbial agents, including pathogenic viruses, pathogenic bacteria, fungi, protozoa, multicellular parasites, and aberrant proteins known as prions. Serological methods are highly sensitive, specific and often extremely rapid tests used to identify microorganisms. These tests are based upon the ability of an antibody to bind specifically to an antigen. The antigen, usually a protein or carbohydrate made by an infectious agent, is bound by the antibody. Serological tests, if available, are usually the preferred route of identification. There are several serology techniques that can be used depending on the antibodies being studied. These include EUSA, agglutination, precipitation, complement-fixation and fluorescent antibodies.

O DIASOURCE OFFERS SEROLOGICAL ELISA ASSAYS

TORCH-panel: Diagnostics of maternal-fetal infections and screening of the risk factors due to congenital infection.

- Toxoplasmosis
- Cytomegalovirus
- Rubella
- Herpes

EBV-panel: Epstein Barr Virus (EBV) is the causative agent of infectious mononucleosis and has long been suspected of having a contributory role in the etiology of Burkitt's Lymphoma and Nasopharyngeal Carcinoma.

• Epstein Barr Virus

Pediatric panel: Diagnostics of common childhood diseases remains important throughout the world, despite the prevalence of immunization programs in many countries.

- Measles
- Mumps
- Varicella

Gastro-Intestinal: The bacterium Helicobacter pylori plays a significant role in the pathologies of chronic gastritis, peptic ulcer and gastric cancer. Serological testing represents a useful non-invasive alternative.

Helicobacter

STD-panel: Treponema pallidum is a Spirochaete bacterium of humans linked to veneral syphilis. Because T. pallidum subspecies cannot be readily isolated and grown in vitro, serological tests are the method of choice for diagnosis of syphilis.

• Treponema pallidum (Syphilis)

Tropical Disease: Tropical diseases are infectious diseases that are prevalent in or unique to tropical and subtropical regions.

- Dengue Fever
- Malaria

Hepatitis panel: Hepatitis is an inflammation of the liver tissue that may cause acute or Chronic liver Disease leading in the worst case to the death of the patient. Serological tests with high specificity and sensitivity are of great importance for the diagnosis of the disease.

- Hepatitis A
- Hepatitis B
- Hepatitis C



| Description | Cat# | Label | Size | Sample type | Sample size (µL) | Quali/ Quanti | Incubation (hours) | Max shelf life (weeks) | Remarks |
|---|------------|-------|-----------|----------------|---------------------|------------------|-----------------------|------------------------------|---------|
| | | Во | rrelia P | anel | | | | | |
| Borrelia recombinant IgG ¹ | BrG192 | HRP | 192 T | S, P, CSF, | 10 (110 | QUANTI | 1,15 | 40 | |
| Borrelia recombinant IgM ¹ | BrM192 | НКР | 1921 | SF | for CSF) | QUANTI | 1,15 | 60 | - |
| | | C | OVID Po | anel | | | | | |
| EIA COVID-19 NP IgA 1 | CoNA96 | | | | | SEMI- | | | |
| EIA COVID-19 NP IgM ¹ | CoNM96 | | | | | QUANTI | | | |
| EIA COVID-19 NP IgG1 | CoNG96 | | 0/ 7 | 0.0 | 1.0 | QUANTI | 1.5 | | |
| EIA COVID-19 RBD IgA ¹ | CoRA96 | HRP | 96 T | S - P | 10 | | 1,5 | 60 | - |
| EIA COVID-19 RBD IgM ¹ | CoRM96 | | | | | SEMI- QUANTI | | | |
| EIA COVID-19 RBD IgG ¹ | CoRG96 | | | | | | | | |
| | | | EBV Par | nel | | | | | |
| Epstein Barr Virus VCA IgG (EBV VCA IgG) ¹ | EAG096 | | | | | 0 | | | |
| Epstein Barr Virus VCA IgM (EBV VCA IgM) ¹ | EAM096 | | | S, P, CSF | | QUANTI | | | |
| Epstein Barr Virus VCA IgA (EBV VCA IgA) 1 | VCA096 | | | | | | | | |
| Epstein Barr Virus EBNA IgM (EBV EBNA IgM) ¹ | EBM096 | HRP | 96 T | | 10 | QUALI | 1,5 | 60 | - |
| Epstein Barr Virus EBNA IgG (EBV EBNA IgG) | EBG096 | | | S - P | | | | | |
| Epstein Barr Virus Early IgM (EBV Early IgM) ¹ | VCM096 | | | S, P, CSF | | QUANTI | | | |
| Epstein Barr Virus Early IgM (EBV Early IgG) ¹ | VCG096 | | | S - P | | QUALI | | | |
| | | Не | patitis F | Panel | | | | | |
| Hepatitis A: IgG (anti-HAV) | KAPG4AGE3 | | | | 10 | | 1,5 | | |
| Hepatitis A: IgM (anti-HAV) | KAPG4AME3 | | 96 T | | 5 | | 2,5 | | |
| | KAPG4SGE3 | | | | | | | | |
| Hepatitis B: HBsAg Screening | KAPG4SGE11 | | 480 T | | 50 | | 2 | | |
| Hepatitis B: HBsAg Confirmation* | KAPG4SA0 | | | | 50 | | 22 | | |
| Hepatitis B: Anti-HBsAg | KAPG4SBE3 | HRP | | S - P | | QUALI | 1,5 | 60 | - |
| Hepatitis B: HBeAg / Anti-HBe | KAPG4BNE3 | | | | 100/50 | | 2,5 | | |
| Hepatitis B: Anti-HBc Total | KAPG4CBE3 | | 96 T | | 50 | | 1,5 | | |
| Hepatitis B: Anti-HBc IgM | KAPG4CME3 | | | | 5 | | 2,5 | | |
| | KAPG4NAE3 | | | | | | | | |
| Hepatitis C: Anti-HCV (4th Generation) | KAPG4NAE12 | • | 480 T | 1 | 100 | | 1,75 | | |

| Description | Cat# | Label | Size | Sample type | Sample size (µL) | Quali/ Quanti | Incubation (hours) | Max shelf life (weeks) | Remarks |
|--|------------|-----------|-----------|----------------|---------------------|------------------|-----------------------|------------------------------|------------------|
| | | Ped | diatric F | Panel | | I I | | 1 1 | |
| Measles IgG ¹ | MeG096 | | | | | | | | |
| Measles IgM ¹ | MeM096 | | | S - P | 10 | QUALI | 1,5 | 48 | |
| Mumps IgG ¹ | MuG096 | | | | | | .,- | | |
| Mumps IgM ¹ | MuM096 | HRP | 96 T | | | | | | - |
| Varicella zoster IgG ¹ | VZVG96 | | | | | QUANTI | | | |
| Varicella zoster IgM ¹ | VZVM96 | | | S, P, CSF | 10 | OLIALI | 1,5 | 60 | |
| Varicelle coster EgA ¹ | VZVA96 | | | | | QUALI | | | |
| | | | HIV Par | nel | | | | | |
| | KAPDHIV96 | | | | | | | | |
| HIV Ab/Ag Combo Elisa, 96T | KARDHIV96* | | 96 T | | | | | | - |
| HIV Ab/Ag Combo Elisa, 192T | KAPDHIV192 | HRP | 192 T | - S-P | 150 | QUALI | 2,5 | 60 | Available on |
| HIV Ab/Ag Combo Elisa, 480T | KAPDHIV480 | - | 480 T | | | | | | specific request |
| | | Resp | oiratory | Panel | | | | | |
| C.pneumonia lgG ¹ | ChpG96 | | | | | QUANTI | 1,5 | 60 | |
| C.pneumonia IgM ¹ | ChpM96 | | | | | QUALI | | | |
| C.pneumonia IgA ¹ | ChpA96 | - | | | | | | | - |
| Tuberculosis IgG Elisa | KAPRTBG38 | - | | | | | | | |
| Tuberculosis IgM Elisa | KAPRTBM39 | HRP | 96 T | S - P | 10 | | | | |
| Mycoplasma IgG1 | MyG096 | - | | | | QUANTI | | | |
| Mycoplasma IgM ¹ | MyM096 | - | | | | | | 60 | |
| Mycoplasma IgA ¹ | MyA096 | | | | | | | | |
| | Sexu | ally Trai | nsmitted | Disease | Panel | | | | |
| Syphillis IgG ¹ | TpG096 | - | | | | | | | |
| Syphillis IgM ¹ | ТрМ096 | | | | 10 | QUALI | 1,5 | | |
| Syphilis Screen ¹ | Tp0096 | - | | | 50 | | 1 | | |
| Chlamydia trachomatis IgG ¹ | ChtG96 | HRP | 96 T | S - P | | | | - 60 | - |
| Chlamydia trachomatis IgM ¹ | ChtM96 | | | | 10 | QUALI | 1,5 | | |
| Chlamydia trachomatis IgA ¹ | ChtA96 | | | | | | | | |

^{1.} Products manufactured by TestLine (company within BioVendor group) – TestLine branded
*For Research Use Only
AF=Amiotic Fluid - CP=Citrate Plasma - CSF=Cerebrospinal Fluid - EP=EDTA Plasma - F=Feces - HP=Heparin Plasma - HS=High Sensitive - IVD=In Vitro Diagnostics - ON=Over night
P=Plasma - Pl=Platelets - S=Serum - Sa=Saliva - SF=Synovial Fluid - SP=Seminal Plasma - TH=Tissue Homogenate - U=Urine - UD=Ultra-dialysates

| Description | Cat# | Label | Size | Sample type | Sample size (µL) | Quali/ Quanti | Incubation (hours) | Max shelf life (weeks) | Remarks | |
|--------------------------------|-----------|--------|----------|----------------|---------------------|------------------|-----------------------|------------------------------|---------|--|
| ToRCH Panel | | | | | | | | | | |
| Herpes simplex virus 1 lgG | KAPDHSV1G | | | | | QUANTI | | | | |
| Herpes simplex virus 1 IgM | KAPDHSV1M | | | | | QUALI | | | | |
| Herpes simplex virus 2 lgG | KAPDHSV2G | | | | | QUANTI | 1h - 1h - 20m | | | |
| Herpes simplex virus 2 lgM | KAPDHSV2M | | | | | | | | | |
| HSV Screening IgM ¹ | HSVM96 | | | | | QUALI | | 60 | | |
| HSV Screening IgG ¹ | HSVG96 | | 96 T | | | | 1,5 | | | |
| CMV IgG1 | CMG096 | | | S - P | 10 | QUANTI | | | | |
| CMV IgM1 | CMM096 | HRP | | 3-1 | 10 | 011411 | 1,15 | | - | |
| CMV IgA ¹ | CMA096 | | | | | QUALI | | | | |
| Rubella IgG¹ | RubG96 | | | | | QUANTI | 1,5 | | | |
| Rubella IgM¹ | RubM96 | | | | | QUALI | | | | |
| Toxo IgG ¹ | TgG096 | | | | | QUANTI | | | | |
| Toxo IgM¹ | TgM096 | | | | | 011411 | 2,15 | | | |
| Toxo IgA¹ | TgA096 | | | | | QUALI | | | | |
| | | Tropic | al Disea | ise Pane | l | | | | | |
| Dengue Fever IgG | KAPDDENG | | | | 10 | | 1h - 1h - 20m | | | |
| Dengue Fever IgM | KAPDDENM | HRP | 96 T | S - P | 10 | QUALI | in - Ih - ∠Um | 60 | - | |
| Malaria Screen | KAPDMA | | | | 150 | | 2,5 | | | |

THYROID FUNCTION

Measurement of Serum Thyroid Hormones T4 /FT4 is the most used thyroid test of all.

The T4 reflects the amount of thyroxine in the blood. If the patient does not take any type of thyroid medication, this test is usually a good measure of thyroid function.

Thyroxine (T4) represents 80% of the thyroid hormone produced by the normal gland and generally represents the overall function of the gland.

The new "sensitive" TSH test will show very low levels of TSH when the thyroid is overactive (as a normal response of the pituitary to try to decrease thyroid stimulation). Interpretations of the TSH level depends upon the level of thyroid hormone; therefore, the TSH is usually used in combination with other thyroid tests such as the T4/FT4 and T3/FT3.

THYROID BINDING GLOBULIN (TBG)

Most of the thyroid hormones in the blood are attached to a protein called thyroid binding globulin (TBG). If there is an excess or deficiency of this protein it alters the T4 or T3 measurement but does not affect the action of the hormone. If a patient appears to have normal thyroid function, but an unexplained high or low T4, or T3, it may be due to an increase or decrease of TBG. Direct measurement of TBG can be done and will explain the abnormal value.

Excess TBG or low levels of TBG are found in some families as an hereditary trait. It causes no problem except falsely elevating or lowering the T4 level. These people are frequently misdiagnosed as being hyperthyroid or hypothyroid, but they have no thyroid problem and need no treatment.

MEASUREMENT OF PITUITARY PRODUCTION OF TSH

Normally, low levels (less than 5 units) of TSH are sufficient to keep the normal thyroid gland functioning properly. When the thyroid gland becomes inefficient such as in early hypothyroidism, the TSH becomes elevated even though the T4/FT4 and T3/FT3 may still be within the "normal" range.

This rise in TSH represents the pituitary gland's response to a drop in circulating thyroid hormone; it is usually the first indication of thyroid gland failure. Since TSH is normally low when the thyroid gland is functioning properly, the failure of TSH to rise when circulating thyroid hormones are low is an indication of impaired pituitary function.

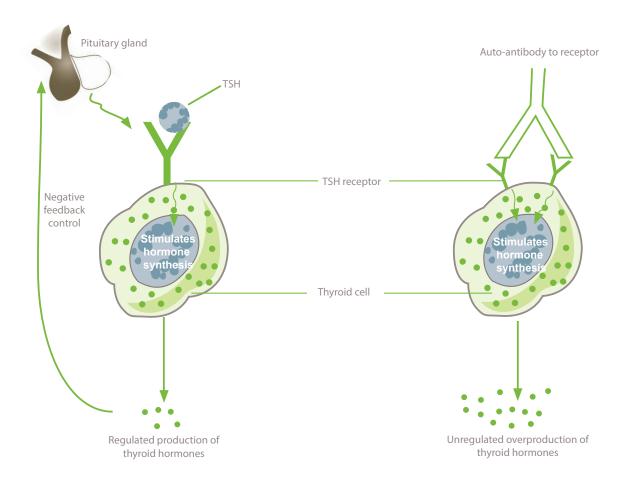


O THYROID ANTIBODIES

The body normally produces antibodies against foreign substances such as bacteria; however, some people are found to have antibodies against their own thyroid tissue. The other 20% is triiodothyronine measured as T3. Sometimes the diseased thyroid gland will start producing very high levels of T3 but still produce normal levels of T4. Therefore measurement of both hormones provides an even more accurate evaluation of thyroid function.

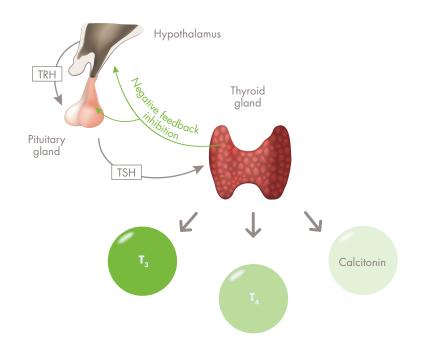
A condition known as Hashimoto's Thyroiditis is associated with a high level of these thyroid antibodies in the blood. Whether the antibodies cause the disease or whether the disease causes the antibodies is not known; however, the finding of a high level of thyroid antibodies is strong evidence of this disease. Occasionally, low levels of thyroid antibodies are found with other types of thyroid disease. When Hashimoto's thyroiditis is present under the form of a thyroid nodule rather than a diffuse goiter, the thyroid antibodies may not be present.

STIMULATING AUTO-ANTIBODIES (GRAVES' DISEASE)



| Thyroid Antibody | Acronym | Present in |
|---|---------|--|
| Thyroid peroxidase antibody | TPOAb | Hashimoto's thyroiditis; Graves' disease |
| Thyroglobulin antibody | TgAb | Thyroid cancer; Hashimoto's thyroiditis |
| Thyroid stimulating hormone receptor antibody | TRAb | Graves' disease |

THYROID HORMONES



TRH: Thyroid Releasing Hormone TSH: Thyroid Simulating Hormone T₃: Triidothyronine hormone T₄: Thyroxine hormone

| Format | Cat# | Label | Size | Sample type | Sample size (µL) | Control Levels | Range | Sensitivity | Incubation (hours) | Max shelf life (weeks) | Remarks |
|------------------------------|---|-------|------|----------------|---------------------|-------------------|---------------|-------------|-----------------------|------------------------------|---------|
| | Anti-TSH Receptors AutoAntibodies (TSH-R Ab) (Third Generation) | | | | | | | | | | |
| ELISA | KAPD4834 | HRP | 96 T | S | 75 | 2 | 0,4-30 U/L | 0,08 U/L | 3,25 | 48 | - |
| | Free L-Thyroxine (FT4) | | | | | | | | | | |
| ELISA | KAPDB4340 | HRP | 96 T | S | 25 | 1 | 2-95 pg/mL | 1 pg/mL | 1,25 | 48 | - |
| Free Triiodo-Thyronine (FT3) | | | | | | | | | | | |
| ELISA | KAPDB4230 | HRP | 96 T | S | 25 | 1 | 1-40 pg/mL | 0,3 pg/mL | 1,25 | 48 | - |
| L-Thyroxine (T4) | | | | | | | | | | | |
| ELISA | KAPDB4240 | HRP | 96 T | S | 20 | 1 | 1-32 µg/dL | 0,6 µg/dL | 0,75 | 60 | - |
| | Thyroid Stimulating Hormone (TSH) | | | | | | | | | | |
| ELISA | KAPDB4080 | HRP | 96 T | S | 50 | 1 | 0,2-30 µIU/mL | O,1 µIU/mL | 1,75 | 60 | - |
| | Triiodo-Thyronine (T3) | | | | | | | | | | |
| ELISA | KAPDB4220 | HRP | 96 T | S | 50 | 1 | 0,2-10 ng/mL | 0,16 ng/mL | 1,25 | 60 | - |

INSTRUMENTS

ELISA READER CAT#: DIA2000



ELISA SHAKER CAT#: DIA4000



STRATEC GEMINI CAT#: GEM10041566



DS2® 2-PLATE ELISA* CAT#: DS262010



*Instruments not for distribution/sales in Russia.

ELISA WASHER CAT#: DIA3000



NEPTUNE CAT#: DIA1000



STRATEC GEMINI COMBO CAT#: GEM 10041560



DSX® 4-PLATE ELISA* CAT#: DSX65400



MICROBLOT-ARRAY CAT#: ARCX



AGILITY®*
CAT#: DSA67000





SMARTKITS® FOR DYNEX AGILITY®

NEW GENERATION OF AUTOMATION WITH THE HIGHEST QUALITY ELISA'S

The SmartKits® include four main components: the consumable bottles of any given reagent kit, a 2D barcode with lot-specific assay information, an insert for holding reagent bottles and a cap holder for reagent bottle caps.

Once caps are removed and stored in the cap holder, the SmartKit® is placed directly into the Dynex Agility® for testing.

Direct-load solution to front-end preparation that reduces technician time and potential for costly data entry errors, while improving ease-of-use, safety, hands on time and performance.

O ADVANTAGES:

- Disposable, single-use inserts require no assembly
- Reagents arrive packaged in the insert with 2D barcodes already affixed
- User only takes the insert from the package, removes and places the reagent bottle cap in the cap holder, and loads the kit into the Agility®





O ENTIRE RANGE OF HUMAN ELISA AVAILABLE*:

Human INFECTIOUS DISEASES: Bacterial, Viral and Parasitic

Human Autoimmunity: Systemic autoimmunity, Intestinal autoimmunity, Rheumatology, Thyroid gland diseases

PS: SmartKits® are only intended to be used on Dynex Agility and cannot be used on any other Elisa analyzer. Each SmartKits® contains 96 tests.



| Cat# | Description | Cat# | Description | | |
|---|---|-----------|--|--|--|
| Human ELISA Kits for diagnostic of infectious diseases* | | | | | |
| SK-BGV096 | SmartEIA Borrelia VIsE IgG | SK-ChG096 | SmartEIA Chlamydia IgG | | |
| SK-BM0096 | SmartEIA Borrelia IgM | SK-ChM096 | SmartEIA Chlamydia IgM | | |
| SK-BrG096 | SmartEIA Borrelia recombinant IgG | SK-ChpA96 | SmartEIA Chlamydia pneumoniae IgA | | |
| SK-BrM096 | SmartEIA Borrelia recombinant IgM | SK-ChpG96 | SmartEIA Chlamydia pneumoniae IgG | | |
| SK-BaGV96 | SmartEIA Borrelia afzelii VlsE IgG | SK-ChpM96 | SmartEIA Chlamydia pneumoniae IgM | | |
| SK-BsGV96 | SmartEIA Borrelia b. sensu stricto VIsE IgG | SK-CpAR96 | SmartEIA Chlamydia pneumoniae REC IgA | | |
| SK-BsM096 | SmartEIA Borrelia b. sensu stricto IgM | SK-CpGR96 | SmartEIA Chlamydia pneumoniae REC IgG | | |
| SK-BgGV96 | SmartEIA Borrelia garinii VlsE IgG | SK-ChtA96 | SmartEIA Chlamydia trachomatis IgA | | |
| SK-BgM096 | SmartEIA Borrelia garinii IgM | SK-ChtG96 | SmartEIA Chlamydia trachomatis IgG | | |
| SK-BppA96 | SmartEIA Bordetella parapertussis IgA | SK-ChtM96 | SmartEIA Chlamydia trachomatis IgM | | |
| SK-BppG96 | SmartEIA Bordetella parapertussis IgG | MeG096 | SmartEIA Measles IgG | | |
| SK-BppM96 | SmartEIA Bordetella parapertussis IgM | MeM096 | SmartEIA Measles IgM | | |
| SK-BpAT96 | SmartEIA Bordetella pertussis Toxin IgA | SK-MyA096 | SmartEIA Mycoplasma IgA | | |
| SK-BpGT96 | SmartEIA Bordetella pertussis Toxin IgG | SK-MyG096 | SmartEIA Mycoplasma IgG | | |
| SK-B _P MT96 | SmartEIA Bordetella pertussis Toxin IgM | SK-MyM096 | SmartEIA Mycoplasma IgM | | |
| SK-CMA096 | SmartEIA CMV IgA | SK-PCG096 | SmartEIA PCP IgG | | |
| SK-CMG096 | SmartEIA CMV IgG | SK-TBG096 | SmartEIA TBE Virus IgG | | |
| SK-CMM096 | SmartEIA CMV IgM | SK-TBM096 | SmartEIA TBE Virus IgM | | |
| SK-EAG096 | SmartEIA EBV EA-D IgG | SK-TBE096 | SmartEIA TBEV lg (klíš ová encefalitida) | | |
| SK-EAM096 | SmartEIA EBV EA-D IgM | SK-TcA096 | SmartEIA Toxocara IgA | | |
| SK-EBG096 | SmartEIA EBV EBNA-1 IgG | SK-TcG096 | SmartEIA Toxocara IgG | | |
| SK-EBM096 | SmartEIA EBV EBNA-1 IgM | SK-TgA096 | SmartEIA Toxoplasma IgA (capture) | | |
| SK-VCA096 | SmartEIA EBV VCA IgA | SK-TgE096 | SmartEIA Toxoplasma IgE (capture) | | |
| SK-VCG096 | SmartEIA EBV VCA IgG | SK-TgG096 | SmartEIA Toxoplasma IgG | | |
| SK-VCM096 | SmartEIA EBV VCA IgM | SK-TgM096 | SmartEIA Toxoplasma IgM (capture) | | |
| SK-HSVG96 | SmartEIA HSV 1+2 IgG | SK-TpG096 | SmartEIA Treponema pallidum IgG | | |
| SK-HSVM96 | SmartEIA HSV 1+2 IgM | SK-TpM096 | SmartEIA Treponema pallidum IgM | | |
| SK-HMA096 | SmartEIA Helicobacter MONO IgA | SK-Tp0096 | SmartEIA Treponema pallidum TOTAL | | |
| SK-HMG096 | SmartEIA Helicobacter MONO IgG | SK-VZVA96 | SmartEIA VZV IgA | | |
| SK-HMM096 | SmartEIA Helicobacter MONO IgM | SK-VZVG96 | SmartEIA VZV IgG | | |
| SK-ChA096 | SmartEIA Chlamydia IgA | SK-VZVM96 | SmartEIA VZV IgM | | |

^{*}Not distributed in Albania, Austria, Belgium, Bosnia and Herzegovina, Croatia, Estonia, Georgia, Lithuania, Montenegro, Netherlands, Serbia, Slovakia, United Kingdom, Jordan, Kuwait, Saudi Arabia, Mexico

| Cat# | Description | Cat# | Description | | | |
|-----------|------------------------------------|-----------|-------------------------------|--|--|--|
| | Human ELISA Kits for autoimmunity* | | | | | |
| SK-ENA096 | SmartEIA ENA screen plus | SK-CCPA96 | SmartEIA CCP IgA | | | |
| SK-SSA096 | SmartEIA SS-A | SK-CCPG96 | SmartEIA CCP IgG | | | |
| SK-Ro6096 | SmartEIA SS-A/Ro60 | SK-ScA096 | SmartEIA ASCA IgA | | | |
| SK-Ro5296 | SmartEIA SS-A/Ro52 | SK-ScG096 | SmartEIA ASCA IgG | | | |
| SK-SSB096 | SK-SSB096 SmartEIA SS-B | | SmartEIA Gliadin IgA | | | |
| SK-Sm0096 | SmartEIA Sm | SK-GIG096 | SmartEIA Gliadin IgG | | | |
| SK-RNP096 | SK-RNP096 SmartEIA U1RNP | | SmartEIA Gliadin DA IgA | | | |
| SK-Scl096 | SK-Scl096 SmartEIA Scl-70 | | SmartEIA Gliadin DA IgG | | | |
| SK-CEN096 | SmartEIA Centromere | SK-MiA096 | SmartEIA Milk IgA | | | |
| SK-Jo1096 | SmartEIA Jo-1 | SK-MiG096 | SmartEIA Milk IgG | | | |
| SK-RFA096 | SK-RFA096 SmartEIA RF IgA | | SmartEIA Milk IgM | | | |
| SK-RFG096 | SK-RFG096 SmartEIA RF IgG | | SmartEIA Transglutaminase IgA | | | |
| SK-RFM096 | SmartEIA RF IgM | SK-tTG096 | SmartEIA Transglutaminase IgG | | | |

^{*}Not distributed in Albania, Austria, Belgium, Bosnia and Herzegovina, Croatia, Estonia, Georgia, Lithuania, Montenegro, Netherlands, Serbia, Slovakia, United Kingdom, Jordan, Kuwait, Saudi Arabia, Mexico

RAPID TESTS

We are commercialising a whole new range of Rapid Screen Tests to provide the clinical laboratories with an excellent alternative (or complementary) for the cumbersome and time-consuming immunoassays. The use of these Rapid Screen Tests will automatically decrease the Turnaround Time (TAT) of any given sample and will expand the possibilities of the hospitals to develop POCT centre's (Point of Care Testing) for cardiology, pregnancy and fertility, drugs of abuse, infectious diseases. These innovative rapid tests combine high quality, simplicity, speed, and specificity...

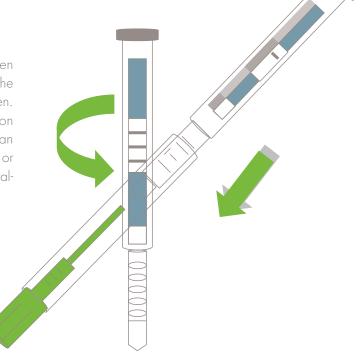
O ADENOVIRUS

Is one of the main causes of acute gastroenteritis and diarrhea, especially in children under the age of two years. Adenoviruses have been identified in almost 12% of the feces of children with gastroenteritis. It was reported that adenovirus is the second leading cause of the hospitalized cases of diarrhea in infant and young children. If not treated, the infection may result in severe dehydration and disorders of body electrolyte balance.

O FECAL OCCUIT BIOOD

Colorectal cancer is the third most common cancer in the world. The appearance of fecal occult blood is often the first, if not the only, indicator associated with colorectal cancer and polyps. Other gastrointestinal disorders such as diverticulitis, Crohn's disease, colitis ulcer, etc. may also be associated with the presence of fecal occult blood.

Have been identifed in almost 40% of the feces of children with gastroenteritis. Rotavirus is the cause of up to 50% of the hospitalized cases of diarrhea in infant and young children. If not treated, the infection may result in severe dehydration and disorders of body electrolyte balance. Therefore, it can be mortal in risk populations such as children, the elderly or immunosuppressed individuals. Rotavirus is transmitted by oral-fecal contact with an incubation period of 1-3 days.





O AMNISTRIP

- A novel diagnostic test for the early detection of fetal membranes rupture (PROM), a high-risk complication of pregnancy
- Premature ROM (PROM) is one of the most common causes of premature delivery and neonatal complications requiring admission to Neonatal Intentive Care Unit
- Risks of neonatal consequences of PROM:
 - Infection
 - Preterm delivery
 - Fetal distress
 - Prolapsed cord
 - Abruptio placenta
- Failure to identify patients with PROM can result in the failure to implement salutary obstetric measures

O HUMAN CHORIONIC GONADOTROPIN (HCG)

- Human chorionic gonadotropin (hCG) is a glycoprotein hormone produced by the developing placenta shortly after fertilization.
- In normal pregnancy, hCG can be detected in urine as early as 7 to 10 days after conception.
- The appearance of hCG in the urine soon after conception, and its subsequent rapid rise in concentration during early gestational growth, make it an excellent marker for the early detection of pregnancy.

| Description | Cat# | Sample type | Size | Sensitivity | | | | |
|-------------------------------------|---------------------|----------------------------|--------------------|---|--|--|--|--|
| Cardiac Diseases Tests | | | | | | | | |
| Troponin | RAPU04A097 | Serum, Plasma, Whole blood | 20 tests | 1 ng/mL | | | | |
| Covid-19 Tests | | | | | | | | |
| COVID-19 lgG-lgM | RAPU08COVID19 | Serum, Plasma, Whole Blood | 25 tests | 96,9% | | | | |
| COVID 19 Antigen | RAPU08COV19AG | Nasopharyngial swab | 20 tests | 96,4% | | | | |
| | | Drug Tests | | | | | | |
| Nicotine/Cotinine card | RAPU08A086 | Urine | 20 tests | 200 ng/mL | | | | |
| | Fertility Tests | | | | | | | |
| hCG Card Pregnancy Test | RAPU01C040 | Urine | 10 Tests | 25 mIU/mL | | | | |
| Amnistrip (PROM test)* | RAPB0513* | Amniotic Fluid* | 10 Tests | 100% | | | | |
| | Helicobacter Pylori | | | | | | | |
| Helicobacter pylori | RAPU08V400 | Serum, plasma, whole blood | 20 tests | 96,8% | | | | |
| | Infe | ctious Diseases Tests | | , | | | | |
| Strep B | RAPU014B280 | Vaginal, rectal swabs | 20 Tests | 90,9% | | | | |
| Fecal Adenovirus Antigen Test strip | RAPEPKT918 | Feces | 30 Tests | 98% reliability | | | | |
| Fecal Rotavirus Antigen Test strip | RAPEPKT917 | Feces | 30 Tests | 97,1% reliability | | | | |
| Fecal Rota-Adeno Duo Antigen | RAPEPKT926 | This is a two and an ad | enovirus antigen t | ing a rotavirus antigen test strip est strip that are back-to-back one test tube. | | | | |
| Fecal Occult Blood | RAPEPKT313 | Feces | 30 Tests | 50 ng h-Hb/ml fecal sample extract, which is about 1 µg h-Hb/gram stool. | | | | |

CUSTOM DIAGNOSTIC LABORATORY SERVICES & SALES CONDITIONS

The scientists at DIAsource have extensive experience in the development of antibodies and related enzymatic or radioactive assays. They can guide you through each step in the process of purifying, fragmenting, coating and labeling antibodies. High level technicians can be consulted at any time to discuss other services like filling and freeze-drying. We can offer specific and flexible suggestions to enhance the performance of your final product. All services are manufactured under strict ISO-9001 guidelines.

○ SERVICES AVAILABLE

Coating services

- Coating of polystyrene tubes individually capped: batch size from 30,000 up to 100,000 tubes with your antibodies according to your coating procedure
- Coating of microtiter plates in sealed aluminum bags with your antibodies according to your coating procedure: batch size from 150 up to 900 microtiter plates
- Primary coated tubes with anti-rabbit, anti-sheep or avidin-streptavidin for RIA-IRMA applications
- Primary microtiter plates with anti-rabbit, anti-sheep, or avidin-streptavidin for ELISA applications

Filling services

• From solution preparation to filling, capping and labeling.

Freeze-drying services

• Freeze-dry from 0.25ml up to 15ml in glass vials: batch size up to 27,000 vials for 5ml vials.

Tailored 1251 labeling

• lodination and purification of your antigen (hapten, peptide, protein) either by gel filtration or HPLC.

Mabs fragmentation

• From the antibodies you send us we can produce F(ab')2 fragments on a large scale.

Labeling Services

• Labeling of your antibody or antigen (hapten, peptide) with several markers such as peroxidase, biotin tag or other labels.

Antibody Purification

 Whatever antibody you send us we can purify it by protein-A, protein-G or caprilic acid precipitation and even by affinity chromatography.



O GENERAL CONDITIONS OF SALES

Article 1 - Application

Unless there is an explicit deviation agreed upon in writing, the present general terms and conditions apply to every DIAsource offer as well as every contract that is formed on the basis of such an offer or an order confirmed by DIAsource. The client waives explicitly and fully the application of its own general terms and conditions by virtue of its relationship with DIAsource. Contracts that have been concluded through the staff or representatives of DIAsource and that do not observe these general terms and conditions do not bind DIAsource.

Article 2 - Conclusion of the contract

An offer from DIAsource is only binding if it is accompanied by a period of acceptance and only if this period has not yet expired. A client's order can only be considered accepted by DIAsource after DIAsource's express written confirmation of that acceptance. As any order has its own specific characteristics and, therefore, the products ordered by one client cannot be redirected to another client, the client cannot cancel an accepted order whether in full or in part. If the client would cancel an accepted order, it will still have to pay the full price of the relevant order. DIAsource reserves the right to (i) refuse requests for customized orders, or requests for modifications of accepted orders; and/or to (ii) charge such modifications or customizations to the client at the then-prevailing actual cost, with a minimum of 25 EUR (excl. VAT). Without prejudice to the third paragraph of this article 2, an administrative fee of 25 EUR (excl. VAT) will be charged by DIAsource for any order with a value of less than 500 EUR (excl. VAT).

Article 3 - Price and related costs

Unless agreed otherwise in writing, all of DIAsource's set prices apply to packaged products that are delivered Ex Works (in the sense of Incoterms 2010) to the registered seat of DIAsource. The following, on top of the stipulated price, are to be paid by the client, unless there is any explicit written deviation from this rule:

(i) All costs of insurance, security, loading, transport, and unpacking of the products.
(ii) All taxes and levies (including VAT and customs duties) related to the delivered products or the items mentioned under (i), including the taxes and levies that are applied or adapted only after the conclusion of the contract.

(iii) All additional costs for DIAsource that have been incurred as a result of differences in the currency exchange rates that are detrimental to DIAsource. Every cost that is charged for execution of payments must always be borne by the client ultimately.

Article 4 - Payment

Unless agreed on otherwise, (i) if DIAsource sends a pro forma invoice to the client, such pro forma invoice must be paid before the confirmed shipment date and (ii) if DIAsource does not send a pro forma invoice to the client, all invoices should be paid upon receipt. The payment of a (pro forma) invoice may not be refused or postponed for any reason whatsoever. Any late payment will make all debts of the client to DIAsource immediately due upon notification to that effect by DIAsource. An interest on late payment will be charged—ex officio and without notice—on the unpaid balance of all debts of the client to DIAsource which are due and payable, and the rate of it will be equal to the interest rate calculated according to Article 5, paragraph 2 of the Act of 2 August 2002 on combating late payments in commercial transactions, increased by 3.5% per year. On top of this, a compensation of 15% of the unpaid balance will be charged to cover the administrative costs associated with late payments, and this at a minimum of EUR 100 per invoice that is paid late. All of this is without prejudice to (i) the possibility for DIAsource to prove the actual damage it suffered and to demand compensation for it, or (ii) the possibility for DIAsource to suspend the further performance of its obligations under this or any other contract with the client, or apply any other common law sanction.

Article 5 – Reservation of ownership – transfer of risk

The ownership of every sold product only passes to the client after the client has fully paid the price and related costs for this product, as well as the late interest and compensation that would be due by virtue of late payment of this price. Before full payment is made, and unless explicitly agreed otherwise in writing, the client may not alienate the product, encumber it with securities, or transform it or attach it to an immovable property in any way; in that time span, the client will conserve the product safely and have it insured; it will also conserve it in a way it can be identified individually, with a legible and visible mark on it, explicitly confirming that it is property of DIAsource. The risk of loss, destruction, or damage to the product (also if caused by force majeure) will nevertheless pass to the client as soon as the product is delivered to the client.

Article 6 – Delivery Period

Every agreed upon delivery term is only (and is to be considered) indicative. Not observing this term does not entitle the client to any remedy, unless the parties agree explicitly in writing that the delivery term is binding (in that event, not observing the delivery term can only give way to indemnification for the damage that is actual, proven, and established in such a way that

both parties are able to submit observations, or to the termination of the sale, any of which can only be sought at the earliest 1 month from the date of a notice demanding delivery).

Article 7 – Hardship

If, beyond the will of DIAsource, unforeseen circumstances (e.g., strike, accidents, weather conditions, material defects, etc.) materialize in the procurement, production, distribution or any other necessary type of process that make the delivery or timely delivery or the performance of any other obligation impossible (or strongly impede this), then DIAsource, depending on the nature of the circumstances, has the right to terminate the contract or suspend the performance of its obligations. DIAsource will not incur any liability if this occurs.

Article 8 – Complaints

Complaints regarding visible defects or non-conformity are only admissible if (i) the product has not been used yet, and (ii) the complaint is in writing and is sent to the commercial services department of DIAsource in Louvain-La-Neuve no later than 3 working days from the date of delivery. After that, the products will irrefutably be considered accepted. Following complaints are also non-receivable: anonymous complaints, claims related to results dating more than a year before the introduction of the same complaint, complaints linked to a "mistake" of the customer "(ex: mishandling, error in following the protocol, etc.), claims related to facts that are not within the competence of DIAsource, claims relating to a failure to provide information by the client, claims related to a subjective nature of the said claim.

Article 9 – Liability/Security

DIAsource will only be liable for hidden defects if the client notifies DIAsource thereof by registered letter within 7 business days after such hidden defects are discovered by the client. This term is to be considered a term unable to be suspended or reset ("délai de déchéance" / "vervaltermijn"). In that event, the client will not be entitled to claim the dissolution of the sale of the relevant product, and DIAsource will only be liable for (i) the decrease in value of the product, and, to the extent DIAsource can be held liable for it, and (ii) the additional damage suffered by the client, it being understood that the client bears the burden of proof. This indemnity (i & ii) will in any event be limited to the price paid by the client for the relevant product. The client must conform strictly with the directives regarding the good distribution practices (GDP) applicable to medical devices marked 'CE'. The client must use the products in a professional way and in accordance with the instructions of DIAsource. The client must inform DIAsource immediately of any dysfunction or any alteration of the properties and/or performances of the product he has bought from DIAsource. If the products are resold by the client to a third party outside of Belgium, the client must provide all documents and necessary instructions to that third party in the language(s) of the country of destination. DIAsource must only accept returned goods to the extent that they are the subject of a complaint which DIAsource has declared admissible and well-founded.

Article 10 - Netting in case of insolvency of the client

In case the client is declared bankrupt, or in case any other insolvency or insolvency-like procedure is initiated in respect of the client, any amounts reciprocally due by and between DIAsource and the client shall be netted automatically and by force of law on the date of the opening of the insolvency procedure, regardless of whether such amounts are already due or determined ("vaststaand"/"liquide") on the date of the opening of the insolvency procedure, and even if they are not entirely certain.

Article 11 - No assignment

The client may not assign its rights and obligations against DIAsource to any third party (through a sale, a capital contribution, a donation or any other transaction, including the sale or contribution of a division ("bedrijfstak"/"branche d'activité") or of a business as a whole ("algemeenheid/ "universalité"), or a merger, spin-off, split-up or other corporate restructuring) without the prior written consent of DIAsource.

Article 12 – Applicable law and competent court

Belgian law applies to all agreements to which the present general terms and conditions apply, but with the exclusion of the application of Belgian private international law and the Convention on the International Sale of Goods of Vienna dated 11 April 1980 (except for the Convention on the Limitation Period in the International Sale of Goods of 14 June 1974, whose application remains). The courts of Walloon Brabant, Belgium are exclusively competent to hear all disputes arising out of or in connection with contracts concluded by DIAsource (including the pre-contractual disputes) to which the present general terms and conditions apply.

Article 13 – Discrepancies between language versions

The present general terms and conditions have been drafted in Dutch, English, French and Spanish. In case of discrepancies between the different language versions, the French version will prevail.

Article 14 – GDPR & Privacy policy

DIAsource is compliant to the General Data Protection Regulation. Our policy for privacy and data protection is available on our website www.diasource-diagnostics.com. Any questions can be sent to: GDPR@diasource.be

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Due to local registration requirement, some products can not be sold in some countries without prior registration.

The products with *,***** have been respectively registered in *USA - ** Canada - *** Australia.

For Japan and Brazil specific registration requirements or for any further information on other products, please contact: regulatory.affairs@diasource.be



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Due to local registration requirement, some products can not be sold in some countries without prior registration.

The products with *,**,*** have been respectively registered in *USA - ** Canada - *** Australia.

For Japan and Brazil specific registration requirements or for any further information on other products, please contact: regulatory.affairs@diasource.be

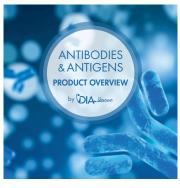


OUR OTHER AVAILABLE PRODUCT CATALOGS









MMUNOASSAYS

- Autoimmunity
- Biogenic Amines
- Bone Metabolism
- Cancer Markers
- Cardiovascular & Salt Balance
- Diabetes & Metabolism

- Fertility
- Gastrointestinal
- Infectious Disease Metabolism
- Growth Factors
- Immunology Markers
- Thyroid Function

O VITAMIN D

- RIA Product:
 - 25OH Vitamin D3
- 250H Vitamin D Total
- 1,25 (OH), Vitamin D
- Raw materials for Vitamin D Assays
- ELISA product:
 - 250H Vitamin D Total
 - 250H Vitamin D Total 90'
 - Free 250H Vitamin D
 - 1,25 (OH)₂ Vitamin D

MULTI-SPECIES

- Allergy
- Endocrinology & Metabolism
- Infectious Disease

ANTIBODIES

- Bone Metabolism
- Cancer Markers
- Cardiovascular & Salt Balance
- Diabetes & Metabolism

- Fertility
- Growth Factors
- Thyroid Function

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