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# Meril Diagnostics

## Biochemistry Reagents Catalogue



# Meril Diagnostics

As part of a new awakening in the In-Vitro Diagnostics industry, Meril Diagnostics has ushered in a wide array of innovative diagnostic products. Emerging from a lineage of successful business enterprise, Meril Diagnostics is a part of the healthcare arm of the business conglomerate. The company is based out at Vapi in the state of Gujarat, which is located 150kms from Mumbai, the commercial hub of India.

A state-of-the-art, 300,000 sq. ft. manufacturing, research and development facility is testimony to the commitment and vision of Meril's future plan to cater to the global IVD market and become a leader in Indian IVD industry by 2018.

Meril

Diagnostics

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## Albumin - BCG

Albumin is a protein made by the liver. A serum albumin test measures the amount of this protein in the clear liquid portion of the blood. Albumin can also be measured in the urine.

- End point with 1 min incubation at 37°C
- Single liquid ready to use reagent
- Linearity limit : 6 gm/dl
- Pack-sizes : 4 x 50 ml, 2 x 500 ml with 2 standard vials



## Alkaline Phosphatase - Modified IFCC kinetic method

The alkaline phosphatase test (ALP) is used to help detect liver disease or bone disorders. In conditions affecting the liver, damaged liver cells release increased amounts of ALP into the blood.

### FSR:

- Kinetic reaction with 60 sec delay & 120 sec. read time
- Linearity : 1200 U/L
- Pack-sizes : 4 x 10 ml, 5 x 20 ml

### FDR:

- Kinetic reaction with 60 sec. delay & 120 sec. read time
- Linearity : 1200 U/L
- Stability of the reconstituted reagent : 5 days at 2-8°C
- Pack-sizes : 5 x 10 ml, 10 x 3 ml



## Amylase – CNPG2

Amylase is an enzyme, special protein, produced by your pancreas and salivary glands. The pancreas can sometimes become damaged or inflamed, which causes it to produce too much or too little amylase. An abnormal amount of amylase in your body may be a sign of a pancreatic disorder

### FSR:

- CNPG2 is direct substrate
- Kinetic reaction within just 3 mins (1 min : delay, 2 mins : Read time)
- Linearity : 2000 IU/L
- Pack-sizes : 4 x 10 ml

### FDR:

- CNPG2 is direct substrate
- Kinetic reaction with in just 3 mins (1 min : delay, 2 mins : Read time)
- Linearity : 2000 IU/L
- Stability of the reconstituted reagent : 5 days at 2-8°C
- Pack-sizes : 5 x 3 ml



## Bilirubin (Total & Direct) - DCA

A bilirubin test is used to determine the cause of jaundice, a yellowing of your skin and the whites of your eyes. It helps to diagnose conditions like liver disease, hemolytic anemia and blocked bile ducts.

- Simple procedure : End-point reaction within 5 minutes for Total Bilirubin & one minute for Direct Bilirubin at 37°C
- Results using ready factors for both Direct & Total Bilirubin
- Linearity up to 30 mg/dl for Total Bilirubin & 20 mg/dl for Direct Bilirubin
- Pack-sizes : 4 x 50 ml, 2x 200 ml, 4x 250 ml, 2x 500 ml
- Also available as separate packs for total Bilirubin : 4 x 25 ml, & Direct Bilirubin : 4 x 25 ml



## Calcium - Arsenazo III

Calcium is an electrolyte that helps keep a proper fluid and acid-base balance in your body.

- End-point reaction within 1 minute at 37°C
- Kit Storage at 2- 8°C, standard included
- Pack-sizes : 2 x 25 ml



## Calcium - OCPC

A blood calcium test is ordered to screen for, diagnose and monitor a range of conditions relating to the bones, heart, nerves, kidneys and teeth. The test may also be ordered if a person has symptoms of a parathyroid disorder, malabsorption or an overactive thyroid.

- End-point reaction within 1 minute at 37°C
- Standard provided in the kit
- Ready to use reagents, storage at 2- 8°C
- Pack-sizes : 2 x 25 ml



## Chloride - Ferric Thiocyanate

Chloride is an electrolyte that helps keep a proper fluid and acid-base balance in your body. The blood test can also be used to monitor conditions, such as high blood pressure, heart failure, kidney disease and liver disease.

- End-point reaction within 1 minute at 37°C
- Linearity is up to 130 mEq/l
- Limit of detection is 0.8 mEq/l
- Standard provided in the kit
- Pack-sizes : 2 x 25 ml



## Cholesterol - CHOD-POD

The test for total cholesterol is used alone or as part of a lipid profile to help predict an individual's risk of developing heart disease because high blood cholesterol has been associated with hardening of the arteries (atherosclerosis), heart disease and a raised risk of death from heart attacks, Cholesterol testing is considered a routine part of preventive healthcare.

### FSR:

- End point procedure with 5 mins incubation at 37°C
- Ready to use reagent
- Two standard vials provided in bigger pack of 5 x 100 ml
- Linearity up to : 750 mg/dl
- Pack sizes : 4 x 25 ml, 4 x 50 ml, 5 x 100 ml

### FDR:

- End point procedure with 5 mins incubation at 37°C
- Reconstitution stability of 60 days at 2 - 8°C
- Linearity of 750 mg/dl
- Pack-sizes : 4 x 25 ml, 2 x 100 ml





## CK - Nac - Nac Activated

A creatine kinase (CK) test may be used to detect inflammation of muscles (myositis) or muscles damage due to muscle disorders (myopathies) such as muscular dystrophy or to help diagnose rhabdomyolysis if a person has signs and symptoms.

### FSR:

- Kinetic reaction with 120 sec. delay & 180 sec. read time
- Liquid stable reagent
- Need based mixing of R1 : R2 = 4 : 1
- Working reagent stability of 10 days at 2 - 8°C
- Linearity of 1800 IU/L
- Pack-sizes : 2 x 8/2 x 2 ml



### FDR:

- Kinetic reaction with 120 sec. delay & 180 sec. read time
- Reconstitution stability of 5 days at 2 - 8°C
- Linearity of 1800 IU/L
- Pack-sizes : 5 x 2.5 ml



## CK - MB - Immunoinhibition

This test measures the amount of an isoenzyme of creatine kinase (CK) in your blood. It is called CK-MB. Measuring CK-MB used to be a common tool for diagnosing heart attacks.

### FSR:

- Kinetic reaction with 300 sec. delay & 180 sec. read time
- Liquid stable reagent
- Need based mixing of R1 : R2 = 4 : 1
- Working reagent stability of 5 days at 2 - 8°C
- Linearity of 1000 IU/L
- Pack-sizes : 2 x 8/2 x 2 ml



### FDR:

- Kinetic reaction with 120 sec. delay & 180 sec. read time
- Reconstitution stability of 5 days at 2 - 8°C
- Linearity of 1000 IU/L
- Pack-sizes : 5 x 2.5 ml



## Creatinine – Jaffe Kinetic

A creatinine blood test measures the level of creatinine in the blood. Creatinine is a waste product that forms when creatine breaks down. Creatine is found in your muscle. Creatinine levels in the blood can provide your doctor with information about how well your kidneys are working.

- Ready to use two liquid stable reagents
- Initial rate reaction, total time taken 2 mins
- Linearity : 30 mg/dl
- Standard provided in the kit
- Pack-sizes : 4 x 25 ml, 6 x 50 ml,  
2 x 250 ml, 2 x 500 ml



## CRP - Turbidimetric Immunoassay

C-reactive protein (CRP) is a blood test marker for inflammation in the body. CRP is produced in the liver and its level is measured by testing the blood. CRP is classified as an acute phase reactant, which means that its levels will rise in response to inflammation

- Quantitative determination of C-Reactive Protein in human serum
- Sample blank non-linear curve
- Linearity : 32 mg/dl
- Sensitivity : 0.08 mg/dl
- Pack-sizes : R1 : 1 x 40 ml, R2 : 1 x 10 ml
- Liquid stable calibrator



## Gamma GT - Glupa

The gamma-glutamyl transferase (GGT) test may be used to determine the cause of elevated alkaline phosphatase (ALP). Both ALP and GGT are elevated in disease of the bile ducts and in some liver diseases, but only ALP will be elevated in bone disease.

### FSR:

- Kinetic reaction with 60 sec. delay & 120 sec. read time
- Liquid stable reagent
- Need based mixing of R1 : R2 = 4 : 1
- Working reagent stability of 21 days at 2 - 8°C
- Linearity of 500 IU/L
- Pack-sizes : 1 x 8 ml / 1 x 2 ml

### FDR:

- Kinetic reaction with 60 sec. delay & 120 sec. read time
- Reconstitution stability of 7 days at 2 - 8°C
- Linearity of 500 IU/L
- Pack-sizes : 5 x 3 ml



## Glucose

A blood glucose test measures the amount of glucose in your blood. Glucose, a type of simple sugar, is your body's main source of energy. Your body converts the carbohydrates you eat into glucose. Glucose testing is primarily done to check for type 1 diabetes, type 2 diabetes and gestational diabetes.

### FSR:

- Trinder's method
- Ready to use reagent
- End point procedure with 10 minutes incubation at 37°C
- Two standard vials provided in bigger packs of 2 litres
- Linearity up to : 500 mg/dl
- Pack sizes : 4 x 50 ml, 5 x 100 ml, 4 x 250 ml, 4 x 500 ml

### FDR:

- GOD - POD method
- End point procedure with 10 minutes incubation at 37°C
- Reconstitution stability of 6 months at 2 - 8°C
- Linearity of 500 mg/dl
- Two standard provided in bigger packs of 5 litres
- Pack-sizes : 4 x 50 ml, 5 x 100 ml, 10 x 100 ml, 5 x 1000 ml



## HbA1c - Latex Enhanced Immunoturbidimetry

The blood test for HbA1c level is routinely performed in people with type 1 and type 2 diabetes mellitus. Blood HbA1c levels are reflective of how well diabetes is controlled. HbA1c levels are reflective of blood glucose levels over the past six to eight weeks and do not reflect daily ups and downs of blood glucose.

- Linearity up to 13%
- Only 5 +5 mins procedure
- Certification : NGSP & Traceable to (DCCT) diabetes control
- Provided with 4 level calibrator set
- Excellent correlation with HPLC
- Pack-sizes : 1 x 40 ml (R1 : 2 x 15 ml, R2 : 2 x 5 ml, R3 : 2 x 50ml & Cal : 4 x 0.5), 1 x 20 ml (R1 : 1 x 15 ml, R2 : 1 x 5 ml, R3 : 2 x 25ml & Cal : 4 x 0.5)



## HDL - Cholesterol-Phosphotungstic

The test for high-density lipoprotein cholesterol (HDL-C) is used as part of a lipid profile to screen for unhealthy levels of lipids and to determine an individual's risk of developing heart disease and to help in making decisions about what treatment to use if there is borderline or high risk.

- End point with reaction time of 10 mins at 37°C
- Linearity upto 125 mg/dl
- Kit storage at 2-8°C, standard included
- Can be used in conjunction with FSR/FDR Cholesterol reagent
- Pack-sizes : 4 x 25 ml



## HDL Direct - Selective Detergent Method

The test for high-density lipoprotein cholesterol (HDL-C) is used as part of a lipid profile to screen for unhealthy levels of lipids and to determine an individual's risk of developing heart disease. HDL-C is considered to be beneficial, thus so-called "good" cholesterol, because it removes excess cholesterol from tissues and carries it to the liver for disposal.

- Ready to use two Liquid stable reagents
- End-point procedure with 5+5 minutes incubation at 37°C
- No interference of triglycerides up to 1800 mg/dl
- Linearity up to 125 mg/dl
- Calibrator is included in the kit
- Pack-sizes : a) R1 : 2 x 24 ml, R2 : 2 x 8 ml b) 4 x 30 ml, R2 : 4 x 10 ml



## LDH-P – DGKC

LDH is most often measured to check for tissue damage. LDH is in many body tissues, especially the heart, liver, kidney, muscles, brain, blood cells and lungs. Other conditions for which the test may be done include Low red blood cell count (anemia)

### FSR:

- Pyruvate to Lactate, kinetic reaction with decreasing slope
- Need based preparation of working reagent, R1:R2 = 4:1
- Stability of working reagent : 5 days at 2 - 8°C
- Linearity up to 2000 IU/L
- Pack-sizes : 1 x 8 ml / 1 x 2 ml



### FDR:

- Pyruvate to Lactate, Kinetic reaction with decreasing slope
- Stability of the reconstituted reagent : 7 days at 2- 8°C
- Linearity upto 2000 IU/L
- Pack-sizes : 5 x 3 ml



## LDL Direct - Selective Detergent Method

Low density lipoprotein cholesterol (LDL-C) values are typically used either to assess a person's risk for heart disease or to follow response to therapy to lower cholesterol. LDL stands for low-density lipoprotein, a type of cholesterol found in your body

- Ready to use two liquid stable reagents
- End-point procedure with 5+5 minutes incubation at 37°C
- No interference of triglycerides up to 1200 mg/dl
- Linearity up to 450 mg/dl
- Calibrator is included in the kit
- Pack-sizes : a) R1 : 1 x 24 ml, R2 : 1 x 8 ml  
b) R1 : 2 x 30 ml, R2 : 2 x 10 ml



## Lipase - Advanced homogenous Micelle technology

The serum lipase test is used to measure the amount of lipase in the body. An amylase test is used to diagnose diseases of the pancreas. The results from these tests are typically used to diagnose and monitor specific health conditions, including: acute pancreatitis, celiac disease.

- Liquid stable reagents
- End Point, 10 mins procedure
- Linearity of 300 IU/L
- Pack-sizes : R1 : 1 x 16 ml R2 : 1 x 10 ml





## Microprotein - Pyrogallol Red

An increase of urinary protein most often indicates a renal disorder due to an increased glomerular permeability or to a decreased tubular reabsorption. There are also pathological proteinurias due to protein overload or to disorders of the lower urinary tract.

- Mono reagent, ready to use Reagent
- End point method with 10 mins incubation at 37°C
- Linear up to 400 mg/dl
- Open vial stability: 60 days at 2 - 8°C
- Standard provided in the kit
- Pack-sizes : 2 x 25 ml



## Phosphorous - Ammonium Molybdate

Phosphorus is a mineral which body needs to build strong bones and teeth. It is also important for nerve signaling and muscle contraction. This test is ordered to see how much phosphorus is in your blood. Kidney, liver and certain bone diseases can cause abnormal phosphorus levels.

- Single ready to use liquid reagent
- Linear upto 15 mg/dl
- Open vial stability: 60 days at 2 to 8°C
- Standard provided in the kit
- Pack-sizes : 2 x 25 ml



## SGPT/SGOT - IFCC

AST (SGOT) and ALT (SGPT) are reasonably sensitive indicators of liver damage or injury from different types of diseases or conditions, and collectively they are termed liver tests or liver blood tests.

### FSR:

- Kinetic reaction with 60 sec. delay & 120 sec. read time
- Liquid stable reagent
- Need based mixing of R1 : R2 = 4 : 1
- Working reagent stability of 30 days at 2 - 8°C
- Linearity of 450 U/L
- Pack-sizes : 4 x 20/4 x 5, 4 x 100/2 x 50 ml



### FDR:

- Kinetic reaction with 60 sec. delay & 120 sec. read time
- Reconstitution stability of 14 days at 2 - 8°C
- Linearity of 450 U/L
- Pack-sizes : 5 x 5 ml, 5 x 10 ml, 4 x 50 ml



## Microalbumin - Turbidimetric Immunoassay

A urine microalbumin test is a test to detect very small levels of a blood protein (albumin) in your urine. A microalbumin test is used to detect early signs of kidney damage in people who are at risk of developing kidney disease

- Quantitative determination of micro albumin in human urine
- Sample blank non-linear curve
- Linearity : 400 mg/l
- Sensitivity : 0.4 mg/l
- Liquid stable calibrator
- Pack-sizes : R1 : 1 x 40 ml, R2 : 1 x 10 ml



## Total Protein - Biuret

A total serum protein test measures the total amount of protein in the blood. It also measures the amounts of two major groups of proteins in the blood: albumin and globulin. Albumin is made mainly in the liver. It helps the blood from leaking out of blood vessels.

- Single, Ready to use reagent
- End point method with 10 mins incubation at 37°C
- Linear up to 15 g/dl
- Open vial stability: 60 days at 2 - 8°C
- Standard provided in the kit
- Pack-sizes : 4 x 50 ml, 2 x 500 ml



## Triglycerides - GPO

Triglycerides are a type of fat found in the blood. High levels of triglycerides may raise the risk of coronary artery disease. A person's triglyceride levels are measured with a blood test along with testing cholesterol levels in the blood.

### FSR:

- End point procedure with 5 mins incubation at 37°C
- Ready to use reagent
- Two standard vials provided in bigger pack of 5 x 100 ml
- Linearity up to : 1000 mg/dl
- Pack sizes : 4 x 25 ml, 4 x 50 ml, 5 x 100 ml



### FDR:

- End point procedure with 5 mins incubation at 37°C
- Reconstitution stability of 60 days at 2 - 8°C
- Linearity of 1000 mg/dl
- Standard provided in the kit
- Pack-sizes : 5 x 5 ml, 5 x 10 ml, 4 x 50 ml



## Urea - Urease GLDH

A blood urea nitrogen (BUN) test measures the amount of nitrogen in your blood that comes from the waste product urea. Urea is made when protein is broken down in your body. Urea is made in the liver and passed out of your body in the urine. A BUN test is done to see how well your kidneys are working.

### FSR:

- Fixed time reaction with delay 20 sec. & read time 60 sec.
- Liquid stable reagent
- Need based mixing of R1 : R2 = 4 : 1
- Working reagent stability of 30 days at 2 - 8°C
- Linearity of 300 mg/dl
- Standard provided in the kit
- Pack-sizes : 4 x 20/4 x 5 ml, 4 x 100/2 x 50 ml



### FDR:

- Fixed time reaction with delay 20 sec. & read time 60 sec.
- Reconstitution stability of 14 days at 2 - 8°C
- Linearity of 300 mg/dl
- Standard provided in the kit
- Pack-sizes : 5 x 10 ml, 4 x 50 ml



## Uric Acid - Uricase Trinder

The uric acid blood test is used to detect high levels of this compound in the blood in order to help diagnose out. The test is also used to monitor uric acid levels in people undergoing chemotherapy or radiation treatment for cancer.

### FSR:

- Ready to use reagent
- End point procedure with 5 mins incubation at 37°C
- Linearity up to : 25 mg/dl
- Two standard vials provided in bigger pack of 10 x 50 ml
- Pack sizes : 4 x 10 ml, 4 x 50 ml, 10 x 50 ml



### FDR:

- End point procedure with 5 mins incubation at 37°C
- Reconstitution stability of 60 days at 2 - 8°C
- Linearity of 25 mg/dl
- Standard provided in the kit
- Pack-sizes : 5 x 5 ml, 5 x 10 ml



# Assay Quick Reference (FSR)

Chemistry Name	Pack Size	Method	Reaction Type	Reaction Direction	Primary Wavelength (nm)	Secondary Wavelength (nm)	Reagent/ Sample blank	Reagent abs. limit	Standard conc	Fixed Factor	Units	Reaction Time (minutes)	Delay Time (Sec)	Read Time (Sec)	No. of readings	Temperature	Sample Type	Sample Size (µL)	Reagent volume			Stability of open bottle	Storage Temperature	Linearity Limit	Reference Range	
																			R1	R2					High	Low
ALBUMIN	4 x 50ml 2 x 500ml	BCG Dye	End Point	Increase	620	NA	Reagent blank	<0.10	3.8	NA	g/dl	1	5	NA	1	37°C	Serum/ plasma	5 µl	500 µl	NA	60 days at 2-8 °C	2-8°C	6	5	3.2	
ALKALINE PHOSPHATASE	4 x 10ml 5x 20ml	Modified IFCC	Kinetic	Increase	405	NA	DI blank	<1.25	NA	2764	U/L	3	60	120	3	37°C	Serum/ plasma	10 µl	500 µl	NA	60 days at 2-8 °C	2-8°C	1200	128	42	
DIRECT BILIRUBIN	4 x 25ml	DCA	End Point	Increase	546	670	Reagent blank	NA	NA	10	mg/dl	1	5	NA	1	37°C	Serum/ plasma	50 µl	400 µl	10 µl	30 days at 15-30 °C	15-30°C	20	0.3	0	
TOTAL BILIRUBIN	4 x 25ml 2 x 200ml	DCA	End Point	Increase	546	670	Reagent blank	NA	NA	12	mg/dl	5	5	NA	1	37°C	Serum/ plasma	50 µl	400 µl	10 µl	30 days at 15-30 °C	15-30°C	30	1.2	0.1	
BILIRUBIN T&D	4 x 50ml 2 x 200ml 4 x 250ml 2 x 500ml	DCA	End Point	Increase	546	670	Reagent blank	NA	D bilirubin	10	mg/dl	1	5	NA	1	37°C	Serum/ plasma	50 µl	400 µl	10 µl	30 days at 15-30 °C	15-30°C	20	0.3	0	
									T Bilirubin	12		5	1			30								1.2	0.1	
CALCIUM	2 x 25ml	Arsenazo III	End Point	Increase	620	NA	Reagent blank	<1.20	10	NA	mg/dl	1	5	NA	1	37°C	Serum/ plasma	10 µl	500 µl	NA	30 days at 15-30 °C	15-30°C	16	10.4	8.4	
CALCIUM	2 x 25ml	OCPC	End Point	Increase	578	670	Reagent blank	<0.50	10	NA	mg/dl	1	5	NA	1	37°C	Serum/ plasma	10 µl	500 µl	500µl	30 days at 15-30 °C	15-30°C	20	10.4	8.4	
CHLORIDE	2 x 25ml	Ferric Thiocyanate	End Point	Increase	505	670	Reagent blank	NA	100	NA	mEq/l	1	5	NA	1	37°C	Serum/ plasma	5 µl	500 µl	NA	60 days at 2-8°C	2-8°C	130	108	96	
CREATININE	4 x 25ml 6 x 50ml 2 x 250ml 2 x 500ml	Jaffe's Method	Initial Rate/ Kinetic	Increase	505	NA	DI blank/no blank	NA	2.0	NA	mg/dl	2	60	60	2	37°C	Serum/ plasma	100 µl	500 µl	500µl	Till exp at 15-30°C	2-8°C	30	1.4	0.6	
HDL – CHOLESTEROL	4 x 25ml	Phospho-tungstic Acid	End Point	Increase	505	670	Reagent blank	NA	25	NA	mg/dl	10	5	NA	1	37°C	Serum/ plasma	50 µl	1000 µl	NA	60 days at 2-8°C	2-8°C	125	80	30	
PHOSPHORUS	2 x 25ml	Ammonium Molybdate	End Point	Increase	340	NA	Reagent blank	<0.4	5	NA	mg/dl	5	5	NA	1	37°C	Serum	10 µl	500 µl	NA	60 days at 15-30°C	2-8°C	15	4.5	2.5	
TOTAL PROTEIN	4 x 50 ml 2 x 500 ml	Biuret Method	End Point	Increase	546	NA	Reagent blank	<0.2	6	NA	g/dl	10	5	NA	1	37°C	Serum/ plasma	10 µl	500 µl	NA	60 days at 15-30°C	2-8°C	15	8.3	6	
MICROPROTEIN	2 x 25ml	Pyrogallol Red	End Point	Increase	620	NA	Reagent blank	No Turbidity	100	NA	mg/dl	10	5	NA	1	37°C	Urine	5 µl	500 µl	100µl	60 days at 2-8°C	2-8°C	400	119.6	21.3	
SGPT	4 x 20 / 4 x 5ml 4 x 20 / 4 x 5ml	IFCC	Kinetic	Decrease	340	NA	DI blank	>1	NA	1768	U/l.	3	60	120	3	37°C	Serum/ plasma	50 µl	400 µl	100µl	30 days at 2-8°C	2-8°C	450	45	0	
SGOT	4 x 20/4 x 5ml 4 x 100/2 x 50ml	IFCC	Kinetic	Decrease	340	NA	DI blank	>1	NA	1768	U/l.	3	60	120	3	37°C	Serum/ plasma	50 µl	400 µl	100µl	30 days at 2-8°C	2-8°C	400	45	0	



# Assay Quick Reference (FSR)

Chemistry Name	Pack Size	Method	Reaction Type	Reaction Direction	Primary Wavelength (nm)	Secondary Wavelength (nm)	Reagent/ Sample blank	Reagent abs. limit	Standard conc	Fixed Factor	Units	Reaction Time (minutes)	Delay Time (Sec)	Read Time (Sec)	No. of readings	Temperature	Sample Type	Sample Size (μL)	Reagent volume		Stability of open bottle	Storage Temperature	Linearity Limit	Reference Range	
																			R1	R2				High	Low
AMYLASE	4 x 10ml	CNPG2	Kinetic	Increase	405	NA	DI blank	<1	NA	3953	U/l	3	60	120	3	37°C	Serum/ Plasma	10 μl	500 μl	NA	60 days at 2-8°C	2-8°C	2000	115	20
CHOLESTEROL	4 x 25ml 4 x 50ml 5 x 100ml	Trinder's	End Point	Increase	505	620	Reagent blank	<0.3	200	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	5 μl	500 μl	NA	60 days at 2-8°C	2-8°C	750	250	140
CK-NAC	2 x 8/ 2 x 2ml	NAC Activated	Kinetic	Increase	340	NA	DI blank	<0.6	NA	8095	u/L	5	120	180	4	37°C	Serum	10 μl	400 μl	100μl	10 days at 2-8°C	2-8°C	1800	200	25
CK-MB	2 x 8 / 2 x 2 ml	IFCC	Kinetic	Increase	340	NA	DI blank	<0.4	NA	8360	u/L	8	300	180	4	37°C	Serum	20 μl	500 μl	NA	5 days at 2-8°C	2-8°C	1000	25	0
GLUCOSE	4 x 50 ml 5 x 100 ml 4 x 250 ml 4 x 500 ml	Trinder's	End Point	Increase	505	620	Reagent blank	<0.3	100	NA	mg/dl	10	5	NA	1	37°C	Serum/ Plasma (flouride)	5 μl	500 μl	NA	60 days at 2-8°C	2-8°C	500	110	70
LDH-P	1 x 8 / 1 x 2 ml	DGKC	Kinetic	decrease	340	NA	DI blank	<1.0	NA	8095	U/l	4	60	180	4	37°C	Serum/ Plasma	10 μl	400 μl	100μl	5 days at 2-8°C	2-8°C	2000	450	200
TRIGLYCERIDE	4 x 25 ml 4 x 50 ml 5 x 100 ml	GPO	End Point	Increase	505	620	Reagent blank	<0.5	200	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	5 μl	500 μl	NA	60 days at 2-8°C	2-8°C	1000	170	35
UREA (BUN)	4 x 20/ 4 x 5 ml 4 x 100/ 2 x 50 ml	Urease – GLDH	Fixed Time	Decrease	340	NA	DI blank	>1.0	50	NA	mg/dl	120	20	60	2	37°C	Serum/ Plasma	5 μl	400 μl	100μl	30 days at 2-8°C	2-8°C	300	45	13
URIC ACID	4 x 10ml 4 x 50ml 10 x 50ml	Uricase - Trinder	End Point	Increase	546	670	Reagent blank	<0.3	6	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	25 μl	1000 μl	NA	60 days at 2-8°C	2-8°C	25	7.2	2.5
GAMMA GT	1 x 8 / 1 x 2 ml	Glupa-C	Kinetic	Increase	405	NA	No blank	<0.7	NA	2210	U/l	3	60	120	3	37°C	Serum/ Plasma	50 μl	800 μl	200 μl	21 days at 2-8°C	2-8°C	500	50	0
LIPASE	1 x 16 / 1 x 10 ml	Advanced Homogeneous Micelle Technology	End Point	Increase	578	670	Reagent blank	<0.7	Mentioned on vial	NA	U/l	5	5	NA	1	37°C	Serum/ Plasma	5 μl	300 μl	180μl	4 weeks at 2-8°C	2-8°C	300	60	13
HDL – DIRECT	2 x 24 / 2 x 8 ml 4 x 30 / 4 x 10 ml	Accelerator Selective Detergent	End Point	Increase	546	670	Reagent blank	No Turbidity	Mentioned on vial	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	5 μl	360μl	120μl	4 weeks at 2-8 °C.	2-8°C	125	50/60	30/45
LDL – DIRECT	1 x 24 / 1 x 8 ml 2 x 30 / 2 x 10 ml	LDL-Direct	End Point	Increase	546	670	Reagent blank	No Turbidity	Mentioned on vial	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	5 μl	450 μl	150μl	4 weeks at 2-8 °C.	2-8°C	450	130	60

# Assay Quick Reference (FDR)

Chemistry Name	Pack Size	Method	Reaction Type	Reaction Direction	Primary Wavelength (nm)	Secondary Wavelength (nm)	Reagent/ Sample blank	Reagent abs. limit	Standard conc	Fixed Factor	Units	Reaction Time (minutes)	Delay Time (Sec)	Read Time (Sec)	No. of readings	Temperature	Sample Type	Sample Size (μL)	Reagent volume R1	Stability of Reconstituted Reagent	Storage Temperature	Linearity Limit	Reference Range	
																							High	Low
ALKALINE PHOSPHATASE	10 x 3 ml 5 x 10 ml	Modified IFCC	Kinetic	Increase	405	NA	DI blank	<1.25	NA	2764	U/l	3	60	120	1	37°C	Serum/ Plasma	20 μl	1000 μl	5 days at 2-8°C	2-8°C	1200	128	42
AMYLASE	5 x 3 ml	CNPG2	Rate/ Kinetic	Increase	405	NA	DI blank	<1	NA	3953	U/l	3	60	120	1	37°C	Serum/ Plasma	20 μl	1000 μl	5 days at 2-8°C	2-8°C	2000	115	20
CHOLESTEROL	4 x 25 ml 2 x 100 ml	CHOD-PAP	End Point	Increase	505	620	Reagent blank	<0.3	200	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	10 μl	1000 μl	60 days at 2-8°C	2-8°C	750	250	140
CK-NAC	5 X 2.5 ml	NAC	Kinetic	Increase	340	NA	DI blank	<0.6	NA	8095	U/l	5	120	180	4	37°C	Serum/ Plasma	20 μl	1000 μl	5 days at 2-8°C	2-8°C	1800	200	25
CK-MB	5 X 2.5 ml	Immunoinhibition	Kinetic	Increase	340	NA	DI blank	<0.4	NA	8360	U/l	8	300	180	4	37°C	Serum/ Plasma	40 μl	1000 μl	5 days at 2-8°C	2-8°C	1000	25	0
GAMMA GT	5 X 3 ml	IFCC	Kinetic	Increase	405	NA	DI blank	<0.7	NA	2210	U/l	3	60	120	3	37°C	Serum/ Plasma	50 μl	1000 μl	7 days at 2-8°C	2-8°C	500	50	0
GLUCOSE	4 X 50 ml 5 x 100 ml 10 x 100 ml 5 x 1000 ml	GOD-POD	End Point	Increase	505	620	Reagent blank	<0.3	100	NA	mg/dl	10	5	NA	1	37°C	Serum/ Plasma	10 μl	1000 μl	6 Months at 2-8°C	2-8°C	500	110	70
LDH-P	5 X 3 ml	DGKC	Kinetic	Decrease	340	NA	DI blank	>1.0	NA	8095	U/l	4	60	180	4	37°C	Serum/ Plasma	20 μl	1000 μl	7 days at 2-8°C	2-8°C	2000	450	200
SGOT	5 X 5 ml 5 x 10 ml 4 x 50 ml	IFCC	Kinetic	Decrease	340	NA	DI blank	>1.0	NA	1768	U/l	3	60	120	3	37°C	Serum/ Plasma	50 μl	500 μl	14 days at 2-8°C	2-8°C	450	45	0
SGPT	5 X 5 ml 5 x 10 ml 4 x 50 ml	IFCC	Kinetic	Decrease	340	NA	DI blank	>1.0	NA	1768	U/l	3	60	120	3	37°C	Serum/ Plasma	50 μl	500 μl	14 days at 2-8°C	2-8°C	450	45	0
TRIGLYCERIDE	5 x 10 ml 5 x 5 ml 4 x 50 ml	GPO	End Point	Increase	505	620	Reagent blank	<0.5	200	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	10 μl	1000 μl	60 days at 2-8°C	2-8°C	1000	170	35
UREA (BUN)	5 x 10 ml 4 x 50 ml	Urease GLDH	Fixed Time	Decrease	340	NA	DI blank	>1.0	50	NA	mg/dl	80 Sec.	20	60	2	37°C	Serum/ Plasma	10 μl	1000 μl	14 days at 2-8°C	2-8°C	300	45	13
URIC ACID	5 x 10 ml 5 x 5 ml	Modified Trinder	End Point	Increase	505	620	Reagent blank	<0.3	6.0	NA	mg/dl	5	5	NA	1	37°C	Serum/ Plasma	25 μl	1000 μl	60 days at 2-8°C	2-8°C	25	7.2	2.5

# Turbidometric Immuno Assay

Chemistry Name	Pack Size	Method	Reaction Type	Reaction Direction	Primary Wavelength (nm)	Secondary Wavelength (nm)	Reagent/Sample blank	Reagent abs. limit	Standard conc	Fixed Factor	Units	Reaction Time (minutes)	Delay Time (Sec)	Read Time (Sec)	No. of readings	Temperature	Sample Type	Sample Size (μL)	Reagent volume		Stability of open bottle	Storage Temperature	Linearity Limit	Reference Range	
																			R1	R2				High	Low
Micro Albumin	1x40/ 1x10/ 1x1ml	Turbidometric Immuno Assay	Sample blank non-linear	Increase	340	NA	Sample blank		Mentioned on vial	NA	mg/L	5	5	NA	2	37°C	Urine	24 μl	800 μl	200 μl		2-8°C	0-400 mg/L	25	0
CRP	1x40/ 1x10/ 1x1ml	Turbidometric Immuno Assay	Sample blank non-linear	Increase	340	NA	Sample blank		Mentioned on vial	NA	mg/dl	5	5	NA	2	37°C	Serum	64 μl	800 μl	200 μl		2-8°C	0-32 mg/dl	1	0
HbA1c	2x15/2x5/ 2x50/ 4x0.5 ml 1x15/1x5/ 2x25/ 4x0.5 ml 2x15/2x5.5/ 1x75/ 4x0.5 ml 2x33/2x14/ 2x80/ 4x0.5 ml	Latex enhanced immunoturbidimetry method	End Point, multistandard	Increase	670	NA	Reagent blank		Mentioned on vial	NA	%	5+5	NA	NA	1	37°C	Hemolysate	10μl	300 μl	10 μl	4 weeks at 2-8 °C.	2-8°C	13%	6.2	4.6