



DECODE GENOMICS AND RESEARCH CENTER PVT LTD

Bagbazar, Kathmandu, Nepal

CLINICAL BIO-CHEMISTRY, HEMATOLOGY, IMMUNOASSAY, SEROLOGY & MOLECULAR BIOLOGY

Certificate Number: MLS- 010

Issue Date: 02-12-2024

Expiry Date: 01-12-2027

Scope of Accreditation

The clinical laboratories under the scope of AERSSC accreditation (ISO 15189:2022) are:

S.No.	Material of Test	Specific Test Performed	Test Method	Range of testing	CV%
CLINICAL BIOCHEMISTRY					
1	Whole Blood	Glycosylated Hb	HPLC	2.7-19.7%	
2	Plasma	Glucose	Glucose oxidase	9.7 - 630 mg/dL	9.3
3	Serum	Albumin	Bromocresol Green	0.32 - 50.6 g/dL	14
4	Serum	Alkaline Phosphatase (ALP)	Diethanolamine buffer, DEA	34.7 - 2183 U/L	12.8
5	Serum	Alanine Aminotransferase (ALT)	Tris buffer without P5P	9.70 - 603 U/L	15.8
6	Serum	Aspartate Aminotransferase (AST)	Tris buffer without P5P	7.2 - 625 U/L	13.7
7	Serum	Bilirubin Direct	Oxidation to Biliverdin/Vanadate	0.09 - 18.83 mg/dL	16.3
8	Serum	Bilirubin Total	Oxidation to Biliverdin/Vanadate	0.09 - 34.04 mg/dL	14.6
9	Serum	Calcium	Arsenazo III	0.36 - 17.24 mg/dL	6.7
10	Serum	Cholesterol	Cholesterol Oxidase - Abell Kendall	33.4 - 640 mg/dL	8.9
11	Serum	Cholesterol HDL	Direct HDL, Clearance method	7.3 -144 mg/dL	14.3
12	Serum	Cholesterol LDL	Direct , Cholesterol esterase, oxidase	7.30 - 860 mg/dL	12.3
13	Serum	Iron	Colorimetric without ppt.	Upto 197 µmol/L	10.9
14	Serum	Creatinine	Enzymatic	0.13 - 27.8 mg/dL	11.5
15	Serum	Gamma Glutamyl Transferase (GGT)	Gamma glut'3-carb'4-nitro(IFCC)	7.60 - 1285 U/L	8.1
16	Serum	Magnesium	Xylidyl blue	0.68 - 8.01 mg/dL	8.85
17	Serum	Potassium	ISE Direct	1.00 - 20.0 mEq/L	
18	Serum	Protein Total	Biuret reaction, end point	0.26 - 14 gm/dL	18.5
19	Serum	Sodium	ISE Direct	70.0 - 200.0 mEq/L	
20	Serum	Triglyceride	Lipase/GPO-PAP no correction	11.9 - 1124 mg/dL	9.7
21	Serum	Uric Acid	Uricase Perox. with ascorbate ox @ 546n	0.35 - 23.12 mg/dL	9.4
22	Serum	Urea	Urease, kinetic	3.06 - 303 mg/dL	10.5

S.No.	Material of Test	Specific Test Performed	Test Method	Range of testing	CV%
Hematology					
1	EDTA Whole Blood	AEC	Manual	0.0 to 100 × 10 ³ cells/μL	
2	EDTA Whole Blood	Neutrophil	Light scatter by laser	0.0 to 100 × 10 ³ cells/μL	
3	EDTA Whole Blood	Lymphocyte	Light scatter by laser	0.0 to 100 × 10 ³ cells/μL	
4	EDTA Whole Blood	Monocyte	Light scatter by laser	0.0 to 100 × 10 ³ cells/μL	
5	EDTA Whole Blood	Eosinophil	Light scatter by laser	0.0 to 100 × 10 ³ cells/μL	
6	EDTA Whole Blood	Basophil	Light scatter by laser	0.0 to 100 × 10 ³ cells/μL	
7	EDTA Whole Blood	HCT	Histogram Calculation	0.0 to 85 %	
8	EDTA Whole Blood	Hemoglobin	Surfactant method	0.20 to 25.00 gm/dL	
9	EDTA Whole Blood	MCH	Histogram Calculation	0.0 to 99.9 pg	
10	EDTA Whole Blood	MCHC	Histogram Calculation	0.0 to 99.9 gm/dL	
11	EDTA Whole Blood	MCV	Histogram Calculation	50.0 to 150.0 fL	
12	EDTA Whole Blood	Platelets	Electrical resistance detection	7.0 to 2000 × 10 ³ cells/μL	
13	EDTA Whole Blood	RBC	Electrical resistance detection	0.2 to 800 × 10 ⁶ cells/μL	
14	EDTA Whole Blood	RDW	Histogram Calculation	10 to 40%	
15	EDTA Whole Blood	WBC	Light scatter by laser	0.20 to 100.0 × 10 ³ cells/μL	
Immunoassay					
1	Serum	Alfa Feto Protein	CLIA	0.605 - 1210 ng/ml	20.8
3	Serum	Ferritin	CLIA	0.500 - 2000 ng/mL	19.6
4	Serum	Free T4	CLIA	0.038 - 7.77 ng/dL	26.1
5	Serum	Free T3	CLIA	0.108 - 13.62 pg/ml	38.3
6	Serum	Follicule Stimulating Hormone	CLIA	0.100 - 200 mIU/mL	18.5
7	Serum	Human Chorionic Gonadotropin - Beta	CLIA	0.100 - 10000 mIU/mL	21.1
8	Serum	Luteinizing Hormone	CLIA	0.100 - 200 mIU/mL	41.1
9	Serum	Prolactin	CLIA	0.0470 - 470 ng/ml	49.8
10	Serum	Progesterone	CLIA	0.05 - 60 ng/mL	22.3
12	Serum	Testosterone	CLIA	0.025 - 15.0 ng/ml	7.3
13	Serum	Thyroid Stimulating Hormone	CLIA	0.005 - 100 μIU/mL	25.7
14	Serum	Vitamin B12	CLIA	50 - 2000 pg/mL	32.2
15	Serum	Vitamin D	CLIA	3 - 100 ng/mL	32.2
Serology					
1	Urine	Routine and Microscopic	Manual Method		
2	Stool	Routine and Microscopic	Microscopy		
3	Stool	Reducing Substances	Benedict Method		
4	Stool	H. Pylori Ag	Immunochromatography		
5	Urine	Pregnancy Test	Immunochromatography		
Molecular Biology					
1	Serum/ EDTA Plasma	HBV PCR	Real Time PCR	<20 IU/mL	

2	Serum/ EDTA Plasma	HCV PCR	Real Time PCR	<20 IU/mL	
3	Cervical Swab	HPV PCR	Real Time PCR	<20 IU/mL	
4	Throat, Nasal Swab	Covid 19 PCR	Real Time PCR	<20 IU/mL	
5	Sputum, BAL, Body fluid	TB PCR	Real Time PCR	<20 IU/mL	

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