



Laboratory:- Kathmandu Pathlab and Diagnostic Center Pvt Ltd
Nagpokhari-1, Kathmandu

Discipline:- Clinical Biochemistry, Cytopathology, Haematology,
Histopathology, Serology

Certificate no: MLS002/03

Issue Date:-09/06/2021

Expiry Date: 08/06/2024

S. No	Materials examined/tested	Specific tests/examination performed	Specification, standard (method) or technique used	Range of testing/ Limit of detection	CV	MU (\pm)
Biochemistry						
1	SERUM	THYROID STIMULATING HORMONE	CLIA	0.01-100.0 μ IU/ml	4.1	Value \pm 0.15
2	SERUM	FREE TRIIODOTHYORININE	CLIA	1.5-30.0 pg/ml	7.22	Value \pm 0.39
3	SERUM	FREE THYROXINE HORMONE	CLIA	0.4-6.0 ng/dl	4.79	Value \pm 0.15
4	SERUM	PROLACTIN HORMONE	CLIA	0.6-200.0 ng/ml	6.86	Value \pm 4.46
5	SERUM	FOLLICLE-STIMULATING HORMONE (FSH)	CLIA	1.02-116.0 mIU/ml	8.51	Value \pm 0.98
6	SERUM	LUTEINIZING HORMONE(LH)	CLIA	0.01-250.0 mIU/ml	11.14	Value \pm 9.21
7	SERUM	HUMAN CHORIONIC GONADOTROPIN HORMONE(β HCG)	CLIA	1.20-15000.0 mIU/ml	8.43	Value \pm 2.0
8	SERUM	ESTRADIOL	CLIA	10.-1000.0	15.71	Value \pm 16.25

		HORMONE, (E2)		pg/ml		
9	SERUM	TESTOSTERONE HORMONE	CLIA	12.98-1009.0 ng/dl	8.48	Value ±10.04
10	SERUM	CARCINO- EMBRYONIC ANTIGEN (CEA)	CLIA	0.1-1000.0 ng/ml	8.76	Value ± 6.03
11	SERUM	ALFA FETOPROTEIN (AFP)	CLIA	0.03-300.0 IU/ml	7.34	Value ± 1.42
12	SERUM	PROSTATE- SPECIFIC ANTIGEN (TOTAL)	CLIA	0.004-100.0 ng/ml	10.24	Value ±3.65
13	SERUM	FERRITIN	CLIA	1.0-2000.0 ng/ml	10.34	Value ± 2.46
14	SERUM	ANTI-THYROID PEROXIDASE ANTIBODY (Anti- TPO)	CLIA	0.04-1000.0 IU/ml	5.32	Value ±6.71
15	SERUM	CA-125	CLIA	2.2-1000.0 U/ml	8.48	Value ± 4.44
16	SERUM	CA19-9	CLIA	2.0-1200.0 U/ml	10.39	Value ± 15.39
17	SERUM	CA15-3	CLIA	0.5-800.0 U/ml	5.56	Value ± 4.82
18	SERUM	VITAMIN B12	CLIA	83-1200.0 pg/ml	10.26	Value ± 41.76
19	SERUM	25-OH VITAMIN D3	CLIA	3.0-160.0 ng/ml	6.33	Value ± 1.39

S. No	Materials examined/tested	Specific tests/ examination performed	Specification, standard (method) or technique used	Range of testing/ Limit of detection	CV	MU (±)
Hematology						
1	Whole blood	TOTAL LEUCOCYTE COUNT	DC detection method	0.03-418.70 (10 ³ /μL)	1.45	Value ±311.47
2	Whole blood	DIFFERENTIAL LEUCOCYTECOUNT	Manual	NA	NA	NA
3	Whole blood	HEMOGLOBIN	Non cyanide HGB method	0.01-21.75 g/dl	1.128	Value ±0.312
4	Whole blood	RBC	Hydrodynamic focusing	0.0001-8.61 (10 ⁶ /μL)	1.083	Value ±0.091
5	Whole blood	PLATELETS	DC detection method	1.0 - 971.0 (10 ³ /μL)	4.275	Value ±13450.91
6	Whole blood	HEMATOCRIT VALUE	Calculation	NA	1.342	Value ± 0.897
7	Whole blood	MEAN CORPUSCULAR VOLUME	Calculation	NA	1.2	Value ± 3.062
8	Whole blood	MEAN CORPUSCULAR HEMOGLOBIN	Calculation	NA	1.2	Value ± 0.721
9	Whole blood	MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION	Calculation	NA	1.04	Value ±1.026

NA: not applicable.

S. No	Materials examined/tested	Specific tests/examination performed	Specification, standard (method) or technique used	Range of testing/ Limit of detection	CV	MU (±)
Serology						
1	SERUM	ANTI-NUCLEAR ANTIBODY(ANA)	ELISA	Ratio=0.08	3.61	Value ±0.30
2	SERUM	ANTI-DOUBLE STRANDED DNA(ANTI-Ds DNA)	ELISA	2.6 IU/ml	2.23	Value ± 0.43
3	SERUM	HEPATITIS SURFACE ANTIGEN (HbsAg)	ELISA	NA	4.17	Value ±0.19
4	SERUM	HEPATITIS SURFACE E ANTIGEN (HbeAg)	ELISA	NA	2.72	Value ±0.16
5	SERUM	HEPATITIS SURFACE E ANTIBODY (ANTI- HBE)	ELISA	NA	3.42	Value ±0.19
6	SERUM	HEPATITIS A VIRUS ANTIBODY (ANTI-HAV IGM)	ELISA	NA	2.76	Value ±0.67
7	SERUM	HEPATITIS E VIRUSANTIBODY (ANTI-HEV IGM)	ELISA	Ratio=0.0	8.80	Value ±0.02
8	SERUM	HEPATITIS C VIRUS ANTIBODY (ANTI-HCV IGM)	ELISA	NA	3.9	Value ±0.02
9	SERUM	HIV I&II ANTIBODY IGM	ELISA	NA	4.09	Value ±0.17
10	SERUM	TOXOPLASMA ANTIBODY (IGG/IGM)	ELISA	IGG-0.3 IU/ml IGM- ratio-0.1	IGG-2.25 IGM-4.07	IGG-Value ±0.09 IGM Value ±0.01

11	SERUM	RUBELLA VIRUS ANTIBODY (IGG/IGM)	ELISA	IGG -0.3 IU/ml IGM- ratio-0.04	IGG-2.20 IGM-1.97	IGG-Value ±0.06 IGM Value ±0.17
12	SERUM	CYTOMEGALOVIRUS (CMV-IGG/IGM)	ELISA	IGG-0.4 RU/ml IGM- ratio-0.05	IGG-3.38 IGM-4.4	IGG-Value ±0.15 IGM Value ±0.21
13	SERUM	HERPES SIMPLEX VIRUS-1 ANTIBODY, HSV-1(IGG-IGM)	ELISA	IGG-1.1 RU/ml IGM- ratio-0.04	IGG-1.77 IGM-4.73	IGG-Value ±0.08 IGM Value ±0.45
14	SERUM	HERPES SIMPLEX VIRUS-2 ANTIBODY, HSV-2(IGG-IGM)	ELISA	IGG -1.4 RU/ml IGM- ratio-0.05	IGG-1.07 IGM-3.90	IGG-Value ±0.03 IGM Value ±0.02

NA: not applicable.

S. No	Materials examined/ tested	Specific tests/ examination performed	Specification, standard (method) or technique used	Range of testing/ Limit of detection	CV	MU (±)
Histopathology/ Cytopathology						
1	Tissue	Hematoxylin and Eosin stain	Hematoxylin stains the nucleus of the tissue and eosin stains the cytoplasm of the tissue	NA	NA	NA
2	Tissue	PAS stain	Stain the glycogen present in the skin tissue	NA	NA	NA
3	Tissue	AFB stain	Carbol-fuschin stain the mycobacterium present in the tissue in red in color and methylene blue stain background of the tissue section	NA	NA	NA
4	Tissue	Giemsa stain	The acidic dye of the stain stains the nucleus in purple color and basic dye stains the cytoplasm of the tissue	NA	NA	NA
5	Exfoliative /Aspirate	Papanicolaou stain	Hematoxyllin stains the nucleus of the cell and OG-6 stains the keratinized squamous cell and EA(Eosin Azure) is used as counter stain	NA	NA	NA
6	Exfoliative /Aspirate	Wright stain	The acidic dye of the stain, stains the nucleus in purple color and basic dye stains the cytoplasm of the cell	NA	NA	NA
7	Exfoliative /Aspirate	Giemsa stain	The acidic dye of the stain stains the nucleus in purple color and basic dye stains the cytoplasm of the cell	NA	NA	NA

NA: not applicable.

Extended scope for accreditation

S. No	Materials examined/tested	Specific tests/ examination performed	Specification, standard (method) or technique used	Range of testing/ Limit of detection	CV	MU (±)
1.	Serum	Glucose	Enzymatic/PAP-Endpoint(GOD-POD)	20.0-400.0mg/dl 0.2mg/dl	2.39	Value ± 4.77
2.	Serum	Urea	Urease/GIDH-Kinetic	10.0-300.0mg/dl 1.5mg/dl	8.45	Value ±7.79
3.	Serum	Creatinine	Enzymatic/PAP-Kinetic (Jaffe's)	0.10-30.0mg/dl 0.02mg/dl	4.54	Value ±0.14
4.	Serum	Uric acid	Enzymatic/PAP-Kinetic (Uricase)	1.50-25.0mg/dl 0.09/mg/dl	3.39	Value ±0.40
5.	Serum	Total Bilirubin	Malloy-Evelyn modified-End point	0.25-25.0mg/dl 0.04mg/dl	5.6	Value ±0.58
6.	Serum	Direct Bilirubin	Malloy-Evelyn modified-End point	0.08-10.55mg/dl 0.01mg/dl	3.7	Value ±0.19
7.	Serum	ALT/GPT	IFCC method without Pyridoxal phosphate - Kinetic	10.0-450.0U/L 2.9U/L	4.56	Value ±3.57
8.	Serum	AST/GOT	IFCC method without Pyridoxal phosphate - Kinetic	10.0-450.0U/L 2.5U/L	5.22	Value ±3.79
9.	Serum	ALP	Based on DGKC& SCE method-Enzymatic, Kinetic	20-900.0U/L	9.44	Value ±23.64
10.	Serum	Total Protein	Biuret End point	0.20-12.0g/dl 0.03g/dl	5.25	Value ±0.50
11.	Serum	Albumin	Bromocresol green(BCG)	1.6-6.0g/dl 0.03g/dl	5.01	Value ±0.32
12.	Serum	Total Cholesterol	Enzymatic /PAP-End point (CHOD-POD)	20.0-600.0mg/dl 1.0mg/dl	2.16	Value ±6.74
13.	Serum	Triglyceride	Enzymatic-Colorimetric End point	30.0-1000.0mg/dl 3mg/dl	3.3	Value ±6.71
14.	Serum	HDL-C	Enzymatic-Colorimetric End point .Accelerator Selective detergent	5.0-105.0mg/dl 1.2mg/dl	3.31	Value ±3.58
15.	Serum	Sodium	ISE	70.0-200.0mmol/L	0.21	Value ±0.56

16.	Serum	Potassium	ISE	1.0-20.0mmol/L	1.28	Value \pm 0.13
17.	Serum	Iron	Ferene-End point	20-1000.0 μ g/dl 6.0 μ g/dl	3.99	Value \pm 8.29
18.	Whole Blood (EDTA)	HbA ₁ C	HPLC	3.7%-18.4%	0.87	Value \pm 0.18

Handwritten signature