

TEST NAME	TEST ABBREV.	SAMPLE TYPE	UNITS	GENDER/AGE	REFERENCE INTERVAL <sup>#</sup> / POSITIVE CUT OFF
<b>GENERAL CHEMISTRY</b>					
SODIUM	NA	SERUM/PLASMA	mmol/L	M/F	136-145
POTASSIUM	K	SERUM	mmol/L	M/F	3.5-5.1
CHLORIDE	CL	SERUM	mmol/L	M/F	98-107
BICARBONATE	CO2	SERUM/PLASMA	mmol/L	M/F	22-29
UREA	UREA	SERUM	mmol/L	M/F	2.8-8.1
CREATININE(JAFFE)	CREAJ	SERUM	μmol/L	MALE	62-106
CREATININE(JAFFE)	CREAJ	SERUM	μmol/L	FEMALE	44-80
CREATININE(Plus)	CREP	SERUM	μmol/L	MALE	59-104
CREATININE(Plus)	CREP	SERUM	μmol/L	FEMALE	45-84
ESTIMATED GFR(MDRD)	EGFR	SERUM	mL/min/1.73 m <sup>2</sup>	COMMENT	COMMENT
BILIRUBIN TOTAL	BILT	SERUM	μmol/L	MALE	<24
BILIRUBIN TOTAL	BILT	SERUM	μmol/L	FEMALE	<15
ALKALINE PHOSPHATASE	ALP	SERUM	U/L	ADULT(Male)	40-129
ALKALINE PHOSPHATASE	ALP	SERUM	U/L	ADULT(Female)	35-104
ASPARTATE TRANSFERASE	AST	SERUM	U/L	MALE	<40
ASPARTATE TRANSFERASE	AST	SERUM	U/L	FEMALE	<32
ALANINE TRANSFERASE	ALT	SERUM	U/L	MALE	<41
ALANINE TRANSFERASE	ALT	SERUM	U/L	FEMALE	<33
GAMMA GLUTAMATE TRANSFERASE	GGT	SERUM	U/L	MALE	8 to 61
GAMMA GLUTAMATE TRANSFERASE	GGT	SERUM	U/L	FEMALE	5 to 36
LACTATE DEHYDROGENASE	LDH	SERUM	U/L	MALE	<250
LACTATE DEHYDROGENASE	LDH	SERUM	U/L	FEMALE	<250
TOTAL PROTEIN	TP	SERUM	g/L	MALE	60-80
TOTAL PROTEIN	TP	SERUM	g/L	FEMALE	60-80
ALBUMIN	ALB	SERUM	g/L	Adult	35 - 52
GLOBULIN	GLOB	SERUM	g/L	ALL	19-35
ALBUMIN/GLOBULIN RATIO	AGR (ALB/GLOB RAT)	SERUM	Ratio	ALL	0.9-2.0
CALCIUM	CA	SERUM	mmol/L	Adult	2.15-2.55
ADJUSTED CALCIUM	ACA	SERUM	mmol/L	ALL	2.15-2.55
PHOSPHATE	PHOS	SERUM	mmol/L	Adults	0.81-1.45
MAGNESIUM	MG	SERUM	mmol/L	Adults	0.66-1.07
MAGNESIUM	MG	SERUM	mmol/L	60-90 yrs	0.66-0.99
MAGNESIUM	MG	SERUM	mmol/L	>90 yrs	0.70-0.95
URIC ACID	UA	SERUM	μmol/L	MALE	202-416
URIC ACID	UA	SERUM	μmol/L	FEMALE	143-339
AMYLASE	AMY	SERUM	U/L	Adults	<100
C-REACTIVE PROTEIN	CRP	SERUM	mg/L	Adults	<5.0
C-REACTIVE PROTEIN - HIGH SENSITIVITY	CRPHS	SERUM	mg/L	Adults	<5.0
CREATINE KINASE	CK	SERUM	U/L	MALE	<190
CREATINE KINASE	CK	SERUM	U/L	FEMALE	<170
TRIGLYCERIDE RANDOM	TRIG	SERUM	mmol/L	ADULT/PAED	≤2.0
TRIGLYCERIDE FASTING	TRIG	SERUM	mmol/L	ADULT/PAED	≤1.7
CHOLESTEROL RANDOM	CHOL	SERUM	mmol/L	ADULT/PAED	≤5.0
CHOLESTEROL FASTING	CHOL	SERUM	mmol/L	ADULT/PAED	≤5.0
HDL CHOLESTEROL FASTING	HDLC	SERUM	mmol/L	ADULT/PAED	M: ≥1.0 ; F: ≥1.2
HDL CHOLESTEROL RANDOM	HDLC	SERUM	mmol/L	ADULT/PAED	M: ≥1.0 ; F: ≥1.2
LDL CHOLESTEROL	LDLC	SERUM	mmol/L	ADULT/PAED	≤3.0
LDL CHOLESTEROL	LDLC	SERUM	mmol/L	ADULT/PAED	≤3.0
NON HDL CHOLESTEROL FASTING	NHC	SERUM	mmol/L	ADULT/PAED	≤3.8
NON HDL CHOLESTEROL RANDOM	NHC	SERUM	mmol/L	ADULT/PAED	≤3.8
GLUCOSE	GLU	SERUM/PLASMA	mmol/L	ADULTS - FASTING	3.9-5.5
GLUCOSE RANDOM	GLU	SERUM/PLASMA	mmol/L	ADULTS - RANDOM	<7.8
IRON	IRON	SERUM	μmol/L	ADULTS	5.83-34.5
Lithium	Li	Serum	mmol/L	ADULTS	0.6-1.2
UNSATURATED IRON BINDING CAPACITY	UIBC	SERUM	μmol/L	MALE	22.3-61.7
UNSATURATED IRON BINDING CAPACITY	UIBC	SERUM	μmol/L	FEMALE	24.2-70.1
TOTAL IRON BINDING CAPACITY	TIBC	SERUM	μmol/L	M/F	41-77
TRANSFERRIN	TRSF	SERUM	g/L	ADULT	2.0-3.6
TRANSFERRIN SATURATION	TS	SERUM	%	ADULT	16-45
RHEUMATOID FACTOR	RH	SERUM	IU/MI	ADULT	<14
HAEMOGLOBIN A1C (IFCC)	HGBA1C	WHOLE BLOOD	mmol/mol	ADULT	29-42
<b>IMMUNOCHEMISTRY/ENDOCRINOLOGY</b>					
AMH	AMH	SERUM	pmol/L	FEMALE 20-24 Y	8.71-83.6
AMH	AMH	SERUM	pmol/L	FEMALE 25-29Y	6.35-70.3

AMH	AMH	SERUM	pmol/L	FEMALE 30-34Y	4.11-58.0
AMH	AMH	SERUM	pmol/L	FEMALE 35-39Y	1.05-53.5
AMH	AMH	SERUM	pmol/L	FEMALE 40-44Y	0.193-39.1
AMH	AMH	SERUM	pmol/L	FEMALE 45-50Y	0.071-19.3
AMH	AMH	SERUM	pmol/L	PCOS WOMEN	13.3-135
AMH	AMH	SERUM	pmol/L	MALE	5.5-103
FREE T3	FT3	SERUM	pmol/L	MALE/FEMALE	3.1-6.8
FREE T4	FT4	SERUM	pmol/L	ADULT	12-22
THYROID STIMULATING HORMONE	TSH	SERUM	mIU/L	ADULT	0.27-4.2
ESTRADIOL	E2	SERUM	pmol/L	MALE	41.4-159
ESTRADIOL	E3	SERUM	pmol/L	FEMALE(FP)	114-332
ESTRADIOL	E4	SERUM	pmol/L	FEMALE(OP)	222-1959
ESTRADIOL	E5	SERUM	pmol/L	FEMALE(LP)	222-854
ESTRADIOL	E6	SERUM	pmol/L	FEMALE(PM)	<505
FOLLICULAR STIMULATING HORMONE	FSH	SERUM	IU/L	MALE	1.5 - 12.4
FOLLICULAR STIMULATING HORMONE	FSH	SERUM	IU/L	FEMALE(FP)	3.5-12.5
FOLLICULAR STIMULATING HORMONE	FSH	SERUM	IU/L	FEMALE(OP)	4.7-21.5
FOLLICULAR STIMULATING HORMONE	FSH	SERUM	IU/L	FEMALE(LP)	1.7-7.7
FOLLICULAR STIMULATING HORMONE	FSH	SERUM	IU/L	FEMALE(PM)	25.8-134.8
βeta-HCG	BHCG	SERUM	IU/L	MALE	<2
βeta-HCG	BHCG	SERUM	IU/L	FEMALE	<1
LUTEINIZING HORMONE	LH	SERUM	IU/L	MALE	1.7-8.6
LUTEINIZING HORMONE	LH	SERUM	IU/L	FEMALE(FP)	2.4-12.6
LUTEINIZING HORMONE	LH	SERUM	IU/L	FEMALE(OP)	14.0-95.6
LUTEINIZING HORMONE	LH	SERUM	IU/L	FEMALE(PM)	7.7-58.5
LUTEINIZING HORMONE	LH	SERUM	IU/L	FEMALE(LP)	1.0-11.4
PROGESTERONE	PROG	SERUM	nmol/L	MALE	<0.16-0.47
PROGESTERONE	PROG	SERUM	nmol/L	FEMALE(FP)	<0.62
PROGESTERONE	PROG	SERUM	nmol/L	FEMALE(OP)	0.18-13.2
PROGESTERONE	PROG	SERUM	nmol/L	FEMALE(PM)	<0.16-0.40
PROGESTERONE	PROG	SERUM	nmol/L	FEMALE(LP)	13.1-46.3
PROLACTIN	PRL	SERUM	mIU/L	MALE	86-324
PROLACTIN	PRL	SERUM	mIU/L	FEMALE(NOT PREG)	102-496
TESTOSTERONE	TESTO	SERUM	nmol/L	MALE 18Y -49Y	8.64-29.0
TESTOSTERONE	TESTO	SERUM	nmol/L	MALE >50Y	6.68-25.7
TESTOSTERONE	TESTO	SERUM	nmol/L	FEMALE 20Y -49Y	0.290-1.67
TESTOSTERONE	TESTO	SERUM	nmol/L	FEMALE >50Y	0.101-1.42
TOTAL PROSTATE SPECIFIC ANTIGEN	TPSA	SERUM	µg/L	MALE	AGE <50 years <2µg/L 50-59 years <3 µg/L 60-69years < 4µg/L 70+ years <5 µg/L REF: HSE/NCCP Guidelines, Version 5 January 2018.
FERRITIN	FERR	SERUM	µg/L	MALE	30-400
FERRITIN	FERR	SERUM	µg/L	FEMALE	13-150
FOLATE	FOL	SERUM	µg/L	ADULT	Result < 3 µg/L is suggestive of folate deficiency but should be interpreted in conjunction with FBC and clinical findings.
VITAMIN B12	B12	SERUM	ng/L	ADULT	197-771
VITAMIN D 25OH	VITD	SERUM	nmol/L	ADULT	>50 nmol/L
THYROXINE (T4)	T4	SERUM	nmol/L	ADULT	66-181
TroponinT hs	TROP	PLASMA	ng/L	ADULT	<14 ng/L
FIT	FIT	faeces	ng/ml	ADULT	< 100ng/ml
Amikacin	AMK	SERUM	mg/L	ALL	Trough (pre-dose) sample- 5 to 10 mg/L
Amikacin	AMK	SERUM	mg/L	ALL	Peak sample- 20 to 25 mg/L
Gentamicin	GENT	SERUM	mg/L	ALL	Trough (pre-dose) sample - 1-2 mg/L
Gentamicin	GENT	SERUM	mg/L	ALL	Peak sample- 5-8 mg/L
Tobramicin	TOBR	SERUM	mg/L	ALL	Trough (pre-dose) sample- 0.5-2.0 mg/L
Tobramicin	TOBR	SERUM	mg/L	ALL	Peak sample - 6-10 mg/L
Vancomycin	VANC	SERUM	mg/L	ALL	Trough (pre-dose) sample-10-15 mg/L
Vancomycin	VANC	SERUM	mg/L	ALL	Peak sample-20 - 40 mg/L

**Reference Ranges are based on manufacturers recommendations**

\*Recommendations for the testing and reporting of lipids in clinical diagnostic laboratories within the Republic of Ireland. Version 7.0 - By the Chemical Pathology subgroup of the Faculty of Pathology RCPI

**For more information, please contact the MLP Chemistry Department.**