

Clinical Chemistry Tests Available on theDxC 700 AU Analyser

Version 9, January 2024

Assay	Method used	Plasma / Serum			Urine		
		Preferred sample type	Required Volume (µl)	Detectable Range	Preferred sample type	Required Volume (µl)	Detectable Range
Sodium ¹	Indirect ISE	Serum or LitHep Plasma only	20	50 - 200 mmol/l	24 hr/No preservative	20	10 - 400 mmol/l
Potassium ¹	Indirect ISE	Serum or LitHep Plasma only		1.0 - 10.0 mmol/l	24 hr/No preservative		2 - 200 mmol/l
Chloride ¹	Indirect ISE	Serum or LitHep Plasma only		50 - 200 mmol/l	24 hr/No preservative		15 - 400 mmol/l
Total Calcium	Arsenazo III	Serum or Heparinised plasma (Avoid complex anticoagulants, no EDTA)	3	1 - 5 mmol/l	24 hr/No preservative	5	0 - 10 mmol/l
Inorganic Phosphorus	Molybdate, UV	Serum or Heparinised plasma	6	0.32 - 6.4 mmol/l	24 hr/No preservative	23	0 - 113 mmol/l
Iron	TPTZ	Serum or Heparinised plasma (Avoid complex anticoagulants)	12	2 - 179 µmol/l	/	/	/
Magnesium	Direct Colorimetric	Serum/Heparinised plasma	5	0.2 - 3.3 mmol/L	24 hr/No preservative	4	0.2 - 9.25 mmol/L
Creatinine	Enzymatic mtd	Serum or Heparinised plasma	6	4.4 - 4420 µmol/l	24 hr/No preservative	4	88 - 44200 mmol/l
Urea	Urease/GLDH	Serum/EDTA or LitHep plasma (No ammonium hep plasma)	2	0.8 - 50 mmol/l	24 hr/No preservative	23	10 - 750 mmol/l
Uric Acid	Uricase/POD	Serum/EDTA or Heparinised plasma	9	89 - 1785 µmol/l	24 hr/No preservative	5	119 - 23800 µmol/l
Total Protein	Biuret mtd	Serum/EDTA or Heparinised plasma	8	30 - 120 g/l	/	/	/
Urinary Protein	Photometric	/	/	/	12-24 hr/No preservative	5	10-2000 mg/dl
Albumin	Bromocresol green	Serum/EDTA or Heparinised plasma	2	15 - 60 g/l	/	/	/
Total Bilirubin	DPD	Serum/EDTA or Heparinised plasma	10	0 - 513 µmol/l	/	/	/
Alkaline Phosphatase (ALP)	IFCC	Serum or Heparinised plasma (Avoid complex anticoagulants)	2	5 - 1500 U/l	/	/	/
Alanine aminotransferase (ALT)	Modified without Pyridoxal phosphate	Serum/EDTA or Heparinised plasma	5	3 - 500 U/l	/	/	/
Aspartate aminotransferase (AST)	Modified without Pyridoxal phosphate	Serum or Heparinised plasma	5	3 - 1000 U/l	/	/	/
Lactate Dehydrogenase (LDH)	SCE 1974	Serum or Heparinised plasma	5	50 - 3000 U/l	/	/	/
Creatine Kinase (CK)	IFCC	Serum or Heparinised plasma (Avoid complex anticoagulants)	6	10 - 2000 U/l	/	/	/
α-Amylase	CNPG III	Serum or Heparinised plasma (Avoid complex anticoagulants)	5	10 - 2000 U/l	/	/	/
Total Cholesterol	Enzymatic CHO-POD	Serum/EDTA or Heparinised plasma	5	0.5 - 18.0 mmol/l	/	/	/
HDL Cholesterol	Enzymatic	Serum or Heparinised plasma	5	0.05 - 4.65 mmol/l	/	/	/
LDL cholesterol	CHO/PAP	Serum or Heparinised plasma	5	0.26 - 10.3 mmol/l	/	/	/
Triglycerides	GPO-POD	Serum/EDTA or Heparinised plasma	2	0.1 - 11.3 mmol/l	/	/	/
Glycerol	Direct Colorimetric	Serum/EDTA or Heparinised plasma	6	0 - 2500 µmol/l	/	/	/
Free Fatty Acids	ACS-ACOD Enzymatic	Serum/EDTA or Heparinised plasma (Fasted)	7	0.01-4.00mmol/l	/	/	/
Glucose	HK G6P-DH	Serum/EDTA or Heparinised plasma	5	0.6 - 45.0 mmol/l	Random & fresh / No preservative	5	0.05 - 45.0 mmol/l
Ketone bodies (Beta-Hydroxybutyrate)	Kinetic enzymatic	Serum/EDTA or Heparinised plasma	4	0.1 - 3.2 mmol/l	/	/	/
LIH (lipaemia, haemolysis icterus) ³	Direct Colorimetric	Serum or Heparinised plasma	5	/	/	/	/

Dead Volume = 40µl in each sample tube⁵

¹ Electrolytes are measured simultaneously / from a single aliquot

³ The LIH test scores the severity of haemolysis, lipaemia and icterus of plasma / serum samples - results are not quantitative