



Analyzer	Test Name	Assay	Minimum sample request	Minimum samples before bulk pricing	Unit (on analyzer)	Reaction Time (minutes)	Sample Volume (µL)
311	ALB Gen.2	Albumin	1	150	g/L	10	2
311	ALP IFCC Gen.2	Alkaline Phosphatase - Total	1	200	U/L	10	2.8
311	BIL-T Gen 3 Special	Bilirubin	1	150	mg/dL	10	2
311	BIL-D Direct Bilirubin	Bilirubin direct	1	300	mg/dL	10	6
311	CA Gen.2	Calcium Gen.2	1	150	mg/dL	10	2
311	Cl Gen.2	Chloride	1	TBD	mmol/L	5	9.7
311	CHOL Gen.2	Cholesterol	1	200	mg/dL	10	2
411	CORT	Cortisol I (For Urine and Saliva Only)	1	50	ug/dL	18	20
411	CORT	Cortisol II (For serum and plasma only)	1	50	ug/dL	18	10
411	C-Peptide	C-Peptide	1	50	ng/mL	18	20
311	CRP Gen.4	C-Reactive Protein	1	150	mg/L	10	2
311	CREA-E plus Gen.2	Creatinine enzymatic	1	150	mg/dL	10	2
411	DHEAS/DHEA	Dehydro-epiandrosterone Sulphate (incl. DHEA)	1	50	ug/dL	18	15
411	E2 Gen.3	Estradiol	1	50	pg/mL	18	25
311	ETOH	Ethanol (Alcohol)	1	50	mg/dL	10	4
311	FRUC	Fructosamine	1	50	umol/L	10	6
311	GLU HK Gen.3	Glucose	1	230	mg/dL	10	2
311	HbA1c Gen 3	Glycosylated/Glycated Haemogl. (HbA1C)	1	140	%	10	5
311	HDL-C plus Gen.4	HDL-Cholesterol	1	310	mg/dL	10	2.4
411	HGH	Human Growth Hormons	1	50	ng/mL	18	40
411	INS	Insulin	1	100	uU/ml	18	20
311	FE Gen.2	Iron	1	150	mg/L	10	8.5
311	LDH acc. IFCC Gen.2	Lactate Dehydrogenase	1	200	U/L	10	2.8
311	LDL-C plus Gen.3	LDL-Cholesterol	1	200	mg/dL	10	2
411	LH	Luteinising Hormone	1	50	mIU/mL	18	20
311	PHOS Gen.2	Phosphate inorganic / Phosphorus	1	200	mg/dL	10	2.5
311	K Gen.2	Potassium	1	TBD	mmol/L	5	9.7
411	PRG Gen 3	Progesterone	1	50	ng/mL	18	20
311	SI Gen.2	Serum Indices - Hemolysis	1	TBD	mAbs	10	6
311	SI Gen.2	Serum Indices - Icterus	1	TBD	mAbs	10	6



Analyzer	Test Name	Assay	Minimum sample request	Minimum samples before bulk pricing	Unit (on analyzer)	Reaction Time (minutes)	Sample Volume (μ L)
311	SI Gen.2	Serum Indices - Lipemia	1	TBD	mAbs	10	6
411	SHBG	Sex Hormone-Binding Globulin	1	50	nmol/L	18	10
311	Na Gen.2	Sodium	1	TBD	mmol/L	5	9.7
411	Testosterone Gen.2	Testosterone (with Dehydro and Free)	1	50	ng/dL	18	20
311	TP Gen.2	Total Protein	1	150	g/dL	10	2
311	TRIGL	Triglycerides	1	150	mg/dL	10	2
311	UREA/BUN	UREA/Blood Urea Nitrogen	1	200	mg/dL	10	2
311	UA Gen.2	Uric Acid	1	200	mg/dL	10	3
411	Vitamin D Total	Vitamin D Total	1	50	ng/mL	27	20



Assay	Reportable Range (Analytical Measuring Range) (AMR)
Albumin	2-60 g/L (30.4-912 µmol/L)
Alkaline Phosphatase - Total	5-1200 U/L (0.084-20.0 µkat/L)
Bilirubin	2.5-600 µmol/L (0.15-35.1 mg/dL)
Bilirubin direct	0.2-10.0 mg/dL
Calcium Gen.2	Serum/ Plasma: 0.20-5.0 mmol/L (0.8-20.1 mg/dL) Urine: 0.20-7.5 mmol/L (0.8-30.1 mg/dL)
Chloride	Serum/ Plasma: 60-140 mmol/L Urine: 20-250 mmol/L
Cholesterol	0.1-20.7 mmol/L (3.86-800 mg/dL)
Cortisol I (For Urine and Saliva Only)	1.00-1750 nmol/L or 0.036-63.4 µg/dL
Cortisol II (For serum and plasma only)	3-1750 nmol/L (0.109-63.4 µg/dL)
C-Peptide	Serum & plasma: 0.003-13.3 nmol/L (0.01-40 ng/mL); Urine: 0.030-133 nmol/L (0.100-400 ng/mL)
C-Reactive Protein	3-350 mg/L (28.6-3333 nmol/L)
Creatinine enzymatic	Serum/ Plasma: 5-2700 µmol/L (0.06-30.5 mg/dL) Urine: 100-54000 µmol/L (1.1-610 mg/dL)
Dehydro-epiandrosterone Sulphate (incl. DHEA)	0.003-27 µmol/L (0.100-1000 µg/dL)
Estradiol	18.4-11010 pmol/L (5.00-3000 pg/mL)
Ethanol (Alcohol)	Serum/ Plasma: 2.20-108 mmol/L (0.101-4.98 g/L) Urine: 2.20-108 mmol/L (0.101-4.98 g/L)
Fructosamine	14-1000 µmol/L
Glucose	Serum/ Plasma: 0.11-41.6 mmol/L (2-750 mg/dL) Urine: 0.11-41.6 mmol/L (2-750 mg/dL)
Glycosylated/Glycated Haemogl. (HbA1C)	Hb: 4-40 g/dL (2.48-24 mmol/L), HbA1c: 0.3-2.6 g/dL (0.186-1.61 mmol/L)
HDL-Cholesterol	3.09-150 mg/dL (0.08-3.88 mmol/L)
Human Growth Hormons	0.030-50.0 ng/mL
Insulin	0.200-1000 µU/mL (1.39-6945 pmol/L)
Iron	0.90-179 µmol/L (5.00-1000 µg/dL)
Lactate Dehydrogenase	10-1000 U/L (0.17-16.7 µkat/L)



Assay	Reportable Range (Analytical Measuring Range) (AMR)
LDL-Cholesterol	3.87-549 mg/dL (0.10-14.2 mmol/L)
Luteinising Hormone	0.100-200 mIU/mL
Phosphate inorganic / Phosphorus	Serum/ Plasma: 0.10-6.46 mmol/L (0.31-20.0 mg/dL) Urine: 1.1-92 mmol/L (3.4-285 mg/dL)
Potassium	Serum/ Plasma: 1.5-10.0 mmol/L Urine: 3-100 mmol/L
Progesterone	0.159-191 nmol/L (0.05-60 ng/mL)
Serum Indices - Hemolysis	L: 10-2000, H: 5-1200, I: 0.5-60
Serum Indices - Icterus	L: 10-2000, H: 5-1200, I: 0.5-60
Serum Indices - Lipemia	L: 10-2000, H: 5-1200, I: 0.5-60
Sex Hormone-Binding Globulin	0.800-200 nmol/L
Sodium	Serum/ Plasma: 80-180 mmol/L Urine: 20-250 mmol/L
Testosterone (with Dehydro and Free)	2.50-1500 ng/dL (0.087-52.0 nmol/L)
Total Protein	2.0-120 g/L (0.2-12 g/dL)
Triglycerides	0.1-10.0 mmol/L (8.85-885 mg/dL)
UREA/Blood Urea Nitrogen	Serum/Plasma: 0.5-40 mmol/L (3.0-240 mg/dL urea, 1.4-112 mg/dL urea nitrogen) Urine: 1-2000 mmol/L (6-12000 mg/dL)
Uric Acid	Serum/ Plasma: 0.2-25.0 mg/dL (11.9-1487 μ mol/L) Urine: 2.2-275 mg/dL (131-16362 μ mol/L)
Vitamin D Total	5.00-60.0 ng/mL or 12.5-150 nmol/L



Assay	Saliva	Urine	Whole Blood	Serum	Plasma: Li-Heparin	Plasma: Na2-Heparin	Plasma: NH4-Heparin	Plasma: K2-EDTA	Plasma: K3-EDTA	Plasma: citrated	Plasma: NaF/Na2-EDTA	Plasma: KF/Na2-EDTA	Plasma: NaF/K-Oxalate
Albumin				x	x			x					
Alkaline Phosphatase - Total				x	x								
Bilirubin				x	x			x					
Bilirubin direct				x	x								
Calcium Gen.2		x		x	x								
Chloride		x		x	x								
Cholesterol				x	x			x					
Cortisol I (For Urine and Saliva Only)	x	x (needs extracted)											
Cortisol II (For serum and plasma only)				x	x			x	x				
C-Peptide		x		x	x				x				
C-Reactive Protein				x	x			x	x				
Creatinine enzymatic		x		x	x			x					
Dehydro-epiandrosterone Sulphate (incl. DHEA)				x	x	x	x		x	x	x		x
Estradiol				x	x			x	x				
Ethanol (Alcohol)		x		x	x			x			x		x
Fructosamine				x	x			x					
Glucose		x		x	x			x			x	x	
Glycosylated/Glycated Haemogl. (HbA1C)			x										
HDL-Cholesterol				x	x			x	x				
Human Growth Hormones				x	x			x	x				
Insulin				x	x				x	x			
Iron				x	x								
Lactate Dehydrogenase				x	x								
LDL-Cholesterol				x	x			x	x				
Luteinising Hormone				x	x			x	x				
Phosphate inorganic / Phosphorus		x		x	x			x					
Potassium		x		x	x								
Progesterone				x	x			x	x				
Serum Indices - Hemolysis				x	x			x	x	x	x		x
Serum Indices - Icterus				x	x			x	x	x	x		x
Serum Indices - Lipemia				x	x			x	x	x	x		x
Sex Hormone-Binding Globulin				x									
Sodium		x		x	x								
Testosterone (with Dehydro and Free)				x	x			x	x				
Total Protein				x	x			x					
Triglycerides				x	x			x					
UREA/Blood Urea Nitrogen		x		x	x			x					
Uric Acid		x		x	x			x					
Vitamin D Total				x	x			x	x				



Assay	Sample Collection Notes
Albumin	Do not use fluoride plasma
Alkaline Phosphatase - Total	
Bilirubin	
Bilirubin direct	
Calcium Gen.2	Serum: Fresh serum collected in the fasting state is the preferred specimen
Chloride	Serum: Use serum free of hemolysis and gross lipemia, collected by standard venipuncture technique. Plasma: Use only lithium heparin. Urine:8 Collect 24-hour urine without additives. Store refrigerated during collection.
Cholesterol	Do not use citrate, oxalate or fluoride. Fasting and nonfasting samples can be used.
Cortisol I (For Urine and Saliva Only)	24-hour urine in clean containers without preservatives and measure the volume Extraction and reconstitution of the urine samples 1. Mix well 600 μ L of urine + 3.0 mL of dichloromethane in a glass tube for 7 minutes. 2. Centrifuge for 5 minutes at 2500 g to separate the phases. 3. Remove and discard the aqueous phase and possible residues at the phase interface. 4. Transfer 1.5 mL of the dichloromethane phase into a clean glass tube and, under a hood, reduce until dry by exposing it to a gentle nitrogen flow. 5. Reconstitute the dry residue with 300 μ L of Diluent Universal and incubate for 30 minutes at 15-25 $^{\circ}$ C while occasionally mixing 4 times for 1 minute in a rotating shaker. 6. Analyze the reconstituted sample in the same way as serum and plasma samples.
Cortisol II (For serum and plasma only)	
C-Peptide	24 h Urine, 1:10 prediluted with Diluent MultiAssay
C-Reactive Protein	



Assay	Sample Collection Notes
Creatinine enzymatic	Urine: Collect urine without using additives. If urine must be collected with a preservative for other analytes, only hydrochloric acid (14 to 47 mmol/L urine, e.g. 5 mL 10 % HCl or 5 mL 30 % HCl per liter urine) or boric acid (81 mmol/L, e.g. 5 g per liter urine) may be used.
Dehydro-epiandrosterone Sulphate (incl. DHEA)	
Estradiol	
Ethanol (Alcohol)	Urine: Use random urine.
Fructosamine	
Glucose	Urine: Collect urine in a dark bottle. For 24-hour urine collections, glucose may be preserved by adding 5 mL of glacial acetic acid to the container before collection. Unpreserved urine samples may lose up to 40 % of their glucose after 24-hour storage at room temperature. ³ Therefore, keep samples on ice during collection.
Glycosylated/Glycated Haemogl. (HbA1C)	The only acceptable anticoagulants are Li-heparin, Na-heparin, K2-EDTA, K3-EDTA, potassium fluoride/Na2-EDTA, NaF/sodium EDTA and NaF/potassium oxalate. Do not use whole blood stored > 8 hours. Hemolysate should be prepared and stored for analysis if whole blood cannot be analyzed within 8 hours of collection.
HDL-Cholesterol	Fasting and non-fasting samples can be used
Human Growth Hormons	
Insulin	
Iron	Do not use EDTA or oxalate plasma.
Lactate Dehydrogenase	
LDL-Cholesterol	Fasting and non-fasting samples can be used
Luteinising Hormone	
Phosphate inorganic / Phosphorus	Urine: Collect in detergent-free containers. Acidify with hydrochloric acid after collection (pH < 3).
Potassium	Serum: Use serum free of hemolysis and gross lipemia, collected by standard venipuncture technique. Plasma: Use only lithium heparin. Urine: ⁸ Collect 24-hour urine without additives. Store refrigerated during collection.



Assay	Sample Collection Notes
Progesterone	
Serum Indices - Hemolysis	
Serum Indices - Icterus	
Serum Indices - Lipemia	
Sex Hormone-Binding Globulin	
Sodium	<p>Serum: Use serum free of hemolysis and gross lipemia, collected by standard venipuncture technique.</p> <p>Plasma: Use only lithium heparin.</p> <p>Urine:8 Collect 24-hour urine without additives. Store refrigerated during collection.</p>
Testosterone (with Dehydro and Free)	
Total Protein	<p>The total protein concentration is 4 to 8 g/L lower when the sample is collected from a patient situated in the recumbent position rather than upright</p>
Triglycerides	
UREA/Blood Urea Nitrogen	Do not use ammonium heparin
Uric Acid	<p>EDTA plasma values are approximately 7 % lower than serum values.</p> <p>Urine: Assay urinary uric acid as soon as possible. Do not refrigerate.</p> <p>To prevent ureate precipitation in urine samples, add sodium hydroxide to keep urine alkaline (pH > 8.0). To achieve stated uric acid stability, add NaOH prior to sample collection. Urine samples are diluted 1 + 10 with distilled/deionized water or 0.9 % NaCl. This dilution is taken into account in the calculation of the results.</p>
Vitamin D Total	



Assay	Lipemic Interference (mg/dL)	Icteric Interference	Hemolytic Interference
Albumin	550	1026 µmol/L (60 mg/dL)	621 µmol/L (1000 mg/dL)
Alkaline Phosphatase - Total	2000	1026 µmol/L (60 mg/dL)	124 µmol/L (200 mg/dL)
Bilirubin	1000	3 mg/dL	800 mg/dL
Bilirubin direct	100	not specified	30 mg/dL
Calcium Gen.2	not specified	1026 µmol/L (60 mg/dL)	621 µmol/L (1000 mg/dL)
Chloride	2000 mg/dL	1026 µmol/L (60 mg/dL)	1000 mg/dL (621µmol/L)
Cholesterol	2000	274 µmol/L (16 mg/dL)	435 µmol/L (700 mg/dL)
Cortisol I (For Urine and Saliva Only)	N/A	N/A	N/A
Cortisol II (For serum and plasma only)	1500	428 µmol/L (25mg/dL)	0.31 mmol/L (0.5 g/dL)
C-Peptide	2000 mg/dL	855 µmol/L (50 mg/dL)	0.186 mmol/L (0.3 g/dL)
C-Reactive Protein	1000	1026 µmol/L (60 mg/dL)	622 µmol/L (1000 mg/dL)
Creatinine enzymatic	2000	257 µmol/L (15 mg/dL)	497 µmol/L (800 mg/dL)
Dehydro-epiandrosterone Sulphate (incl. DHEA)	2000 mg/dL	222 µmol/L (13 mg/dL)	0.35 mmol/L (0.56 g/dL)
Estradiol	1000 mg/dL	1128 µmol/L (66 mg/dL)	0.621 mmol/L (1.0 g/dL)
Ethanol (Alcohol)	500	513 µmol/L (30 mg/dL)	124.2 µmol/L (200 mg/dL)
Fructosamine	1800	85 µmol/L (5 mg/dL)	62 µmol/L (100 mg/dL)
Glucose	1000	1026 µmol/L (60 mg/dL)	621 µmol/L (1000 mg/dL)
Glycosylated/Glycated Haemogl. (HbA1C)	600	1026 µmol/L (60 mg/dL)	n/a
HDL-Cholesterol	2000	1026 µmol/L (60 mg/dL)	745 µmol/L (1200 mg/dL)
Human Growth Hormons	1500 mg/dL	428 µmol/L (25 mg/dL)	0.310 mmol/L (0.500 g/dL)
Insulin	1800 mg/dL	1539 µmol/L (90 mg/dL)	not specified
Iron	1500	1026 µmol/L (60 mg/dL)	125 µmol/L (200 mg/dL)
Lactate Dehydrogenase	1500	1026 µmol/L (60 mg/dL)	9.6 µmol/L (15 mg/dL)
LDL-Cholesterol	200	1026 µmol/L (60 mg/dL)	621 µmol/L (1000 mg/dL)
Luteinising Hormone	1900 mg/dL	1129 µmol/L (66 mg/dL)	0.621 mmol/L (1.0 g/dL)
Phosphate inorganic / Phosphorus	1250	684 µmol/L (40 mg/dL)	186 µmol/L (300 mg/dL)
Potassium	2000 mg/dL	1026 µmol/L (60 mg/dL)	100 mg/dL (60 µmol/L)
Progesterone	200 mg/dL	923 umol/L (54 mg/dL)	0.621 mmol/L (1 g/dL)



Assay	Lipemic Interference (mg/dL)	Icteric Interference	Hemolytic Interference
Serum Indices - Hemolysis	not specified	not specified	not specified
Serum Indices - Icterus	not specified	not specified	not specified
Serum Indices - Lipemia	not specified	not specified	not specified
Sex Hormone-Binding Globulin	2700 mg/dL	1026 μ mol/L (60 mg/dL)	1.8 mmol/L (2.9 g/dL)
Sodium	2000 mg/dL	1026 μ mol/L (60 mg/dL)	1000 mg/dL (621 μ mol/L)
Testosterone (with Dehydro and Free)	1000 mg/dL	513 μ mol/L (30 mg/dL)	0.372 mmol/L (0.6 g/dL)
Total Protein	2000	342 μ mol/L (20 mg/dL)	622 μ mol/L (1000 mg/dL)
Triglycerides	3000 mg/dL	171 μ mol/L (10 mg/dL)	434 μ mol/L (700 mg/dL)
UREA/Blood Urea Nitrogen	serum/plasma: 1000	serum/plasma: 1026 μ mol/L (60 mg/dL)	serum/plasma: 621 μ mol/L (1000 mg/dL)
Uric Acid	1500	684 μ mol/L (40 mg/dL)	621 μ mol/L (1000 mg/dL)
Vitamin D Total	<400 mg/dL	<1129 umol/L	>2 g/L



Assay	Sample Stability
Albumin	2.5 months at 20-25 °C 5 months at 4-8 °C 4 months at -20 °C
Alkaline Phosphatase - Total	7 days at 20-25 °C 7 days at 4-8 °C 2 months at -20 °C
Bilirubin	1 day at 20-25 °C 7 days at 4-8 °C 6 months at -20 °C
Bilirubin direct	2 days at 20-25 °C 7 days at 4-8 °C 6 months at -20 °C
Calcium Gen.2	Stability in serum/plasma: 7 days at 15-25 °C 3 weeks at 2-8 °C 8 months at (-15)-(-25) °C Stability in urine: 2 days at 15-25 °C 4 days at 2-8 °C 3 weeks at (-15)-(-25) °C
Chloride	Stability in serum, plasma and urine samples kept in tightly closed tubes 7 days at 15-25 °C 7 days at 2-8 °C Stable at -20 °C
Cholesterol	7 days at 15-25 °C 7 days at 2-8 °C 3 months at (-15)-(-25) °C



Assay	Sample Stability
Cortisol I (For Urine and Saliva Only)	Saliva: 5 days at 2-8 °C, 3 months at -20 °C. Freeze only once. 24 hour urine: 7 days at 2-8 °C, 3 months at -20 °C (± 5 °C). Freeze only once Stability of the reconstituted extract: 7 days at 2-8 °C, 4 weeks at -20 °C. Freeze only once
Cortisol II (For serum and plasma only)	Stable for 24 hours at 20-25 °C, 4 days at 2-8 °C, 12 months at -20 °C (± 5 °C). Freeze only once.
C-Peptide	Stability of the serum and 24 h urine samples: 4 hours at 15-25 °C 24 hours at 2-8 °C 30 days at -20 °C (± 5 °C). Freeze only once
C-Reactive Protein	Stability in serum and Li-heparin plasma: 2 weeks at 15-25 °C 3 weeks at 2-8 °C 12 months at -20 ± 5 °C Stability in K2- and K3-EDTA plasma: 1 day at 15-25 °C 3 weeks at 2-8 °C 12 months at -20 ± 5 °C



Assay	Sample Stability
Creatinine enzymatic	Stability in serum/plasma: 7 days at 15-25 °C 7 days at 2-8 °C 3 months at (-15)-(-25) °C Stability in urine (without preservative): 2 days at 15-25 °C 6 days at 2-8 °C 6 months at (-15)-(-25) °C Stability in urine (with preservative): 3 days at 15-25 °C 8 days at 2-8 °C 3 weeks at (-15)-(-25) °C
Dehydro-epiandrosterone Sulphate (incl. DHEA)	Stable for 5 days at 20-25 °C, 14 days at 2-8 °C, 12 months at -20 °C (± 5 °C). Freeze only once.
Estradiol	Stable for 12 hours at 20-25 °C, 2 days at 2-8 °C, 6 months at -20 °C (± 5 °C). Freeze only once.
Ethanol (Alcohol)	Serum, Plasma: Li-heparin and K2-EDTA Stability: 2 days at 25 °C 2 weeks at 5 °C 4 weeks at -15 °C Plasma: NaF/Na2-EDTA and NaF/K-Oxalate Stability: 2 weeks at 25 °C 3 months at 5 °C 6 months at -15 °C Stability in Urine: Use random urine. 30 days at 4 °C
Fructosamine	3 days at 15-25 °C 2 weeks at 2-8 °C 2 months at (-15)-(-25) °C



Assay	Sample Stability
Glucose	<p>The stability of glucose in specimens is affected by storage temperature, bacterial contamination, and glycolysis. Plasma or serum samples without preservative (NaF) should be separated from the cells or clot within half an hour of being drawn. When blood is drawn and permitted to clot and to stand uncentrifuged at room temperature, the average decrease in serum glucose is ~ 7 % in 1 hour (0.28 to 0.56 mmol/L or 5 to 10 mg/dL). This decrease is the result of glycolysis. Glycolysis can be inhibited by collecting the specimen in fluoride tubes</p> <p>Stability: 8 hours at 25 °C 3 days at 4 °C Stability in fluoride plasma: 3 days at 15-25 °C Urine. Collect urine in a dark bottle. For 24-hour urine collections, glucose may be preserved by adding 5 mL of glacial acetic acid to the container before collection. Unpreserved urine samples may lose up to 40 % of their glucose after 24-hour storage at room temperature.³ Therefore, keep samples on ice during collection.⁵</p>



Assay	Sample Stability
Glycosylated/Glycated Haemogl. (HbA1C)	3 days at 15-25 °C 7 days at 2-8 °C 6 months at (-15)-(-25) °C Frozen stability of HbA1c has not been determined for samples treated with anticoagulants Na-heparin, NaF/potassium oxalate or NaF/sodium EDTA.
HDL-Cholesterol	Stability in serum: 72 hours at 15-25 °C 7 days at 2-8 °C 3 months at (-15)-(-25) °C 24 months at -70 °C Stability in Li-heparin, K2- and K3-EDTA plasma: 72 hours at 15-25 °C 7 days at 2-8 °C 3 months at (-15)-(-25) °C 18 months at -80 °C It is reported that EDTA stabilizes lipoproteins. ¹¹
Human Growth Hormons	Serum and plasma: Stable for 8 hours at 15-25 °C, 1 day at 2-8 °C, 28 days at -20 °C (± 5 °C). Freeze only once.
Insulin	24 hours at 2-8 °C 6 months at -20 °C (± 5 °C). Freeze only once.
Iron	7 days at 20-25 °C 3 weeks at 4-8 °C several years at -20 °C



Assay	Sample Stability
Lactate Dehydrogenase	7 days at 15-25 °C The sample may be stored for 4 days at 2-8 °C or 6 weeks at -20 °C. In connection with certain diseases (e.g. hepatopathy, diseases of skeletal muscle, malignant tumors), the LDH-4 and LDH-5 isoenzyme portions are increased and unstable in cooled and frozen samples; this may lead to an incorrect LDH value in samples collected from patients suffering from such diseases.
LDL-Cholesterol	7 days at 2-8 °C 12 months at -20 °C 12 months at -70 °C It is reported that EDTA stabilizes lipoproteins
Luteinising Hormone	Stable for 5 days at 20-25 °C, 14 days at 2-8 °C, 6 months at -20 °C (± 5 °C). Freeze only once
Phosphate inorganic / Phosphorus	Stability in serum/plasma: 24 hours at 15-25 °C 4 days at 2-8 °C 1 year at (-15)-(-25) °C Stability in urine: 6 months at 2-8 °C (when acidified) 24-hour urine: Store cooled during collection
Potassium	Stability in serum, plasma and urine samples kept in tightly closed tubes 2 weeks at 15-25 °C 2 weeks at 2-8 °C Stable at -20 °C
Progesterone	Stable for 1 day at 20-25 °C, 5 days at 2-8 °C, 6 months at -20 °C (± 5 °C). Freeze only once
Serum Indices - Hemolysis	
Serum Indices - Icterus	



Assay	Sample Stability
Serum Indices - Lipemia	
Sex Hormone-Binding Globulin	Stable for 5 days at 20-25 °C, 7 days at 2-8 °C, 12 months at -20 °C (± 5 °C). Freeze only once
Sodium	Stability in serum, plasma and urine samples kept in tightly closed tubes 2 weeks at 15-25 °C 2 weeks at 2-8 °C Stable at -20 °C
Testosterone (with Dehydro and Free)	Stable for 1 week at 2-8 °C, 6 months at -20 °C (± 5 °C). Freeze only once
Total Protein	6 days at 20-25 °C 4 weeks at 4-8 °C 1 year at -20 °C
Triglycerides	Stability in serum: 2 days at 20-25 °C 10 days at 4 °C 3 months at -20 °C several years at -70 °C Stability in plasma: 2 days at 20-25 °C 15 days at 4 °C 3 months at -20 °C several years at -70 °C
UREA/Blood Urea Nitrogen	Stability in serum/plasma: 7 days at 20-25 °C 7 days at 4-8 °C 1 year at -20 °C Stability in urine: 2 days at 20-25 °C 7 days at 4-8 °C 1 month at -20 °C



Assay	Sample Stability
Uric Acid	Stability in serum/plasma: 7 days at 4-8 °C 3 days at 20-25 °C 6 months at -20 °C Stability in urine (upon NaOH addition): 4 days at 20-25 °C
Vitamin D Total	Serum, Li-heparin, K2-EDTA and K3-EDTA plasma: 25-hydroxyvitamin D is stable for 8 hours at 20-25 °C 4 days at 2-8 °C 24 weeks at -20 °C (± 5 °C)