

## Assays technical sheet

Name	Short name	Sample type	Anticoagulant	Volume (µL)	Hemolysis sensitive	Sampling procedure • Remarks & limitations
Alanine Aminotransferase	ALT	Serum/Plasma	LiHep/EDTA	11	++	Quickly separate • Highly lipemic samples not indicated
Albumin	ALB	Serum/Plasma/Urine	LiHep/EDTA	2		
Alkaline Phosphatase	ALP	Serum/Plasma	LiHep	2.75		
Ammonia / NH <sub>3</sub>	NH3	Plasma	EDTA	20	+++	Centrifugate immediately, separation in full and closed tubes (or under vacuum), assay in 20-30 min • Without lipemia
α-Amylase Total	AMYL	Serum/Plasma/Urine	LiHep/EDTA	4		Do not pipet by mouth and avoid skin contact (saliva and sweat contains amylase) • EDTA values are approx. 5-10% lower than serum values
Amylase - Pancreatic	AMYLp	Serum/Plasma/Urine	LiHep	4	++	Do not pipet by mouth and avoid skin contact (saliva and sweat contains amylase) - Quickly separate • Special treatment for urine samples
Aspartate Aminotransferase	AST	Serum/Plasma	LiHep/EDTA	11	+++	Quickly separate, avoid to hurt the heart at sampling • Highly lipemic samples not indicated
Bicarbonate liquid (CO <sub>2</sub> )	CO2	Serum/Plasma	LiHep/EDTA	2		Quickly separate, within minutes, put in tubes under vacuum • Quickly assay, within the day
Bilirubin Direct	BILId	Serum/Plasma	LiHep	9		The assay should be performed in the days after sampling - Protect from light
Bilirubin Total	BILI	Serum/Plasma	LiHep/EDTA	2		Pay attention to the heparin concentration in sample tubes • The assay should be performed in the days after sampling - Protect from light
Calcium	CA	Serum/Plasma/Urine	LiHep	3		Separation in 30 min after sampling • With serum samples, fasted animals are preferred
Cholesterol Total	CHOL	Serum/Plasma	LiHep/EDTA	2		EDTA values are slightly lower than serum values
Cholesterol-HDL	HDLc	Serum/Plasma	LiHep/EDTA	2.5		
Cholesterol-LDL	LDLc	Serum/Plasma	LiHep/EDTA	2		
Creatinine (enzymatic)	CREAT	Serum/Plasma/Urine	LiHep/EDTA	2		
Creatine Kinase	CK	Serum/Plasma	LiHep	3	++	Serum is best suited
Creatine Kinase MB	CKmb	Serum/Plasma	LiHep	16,5	+++	Serum is best suited
Free Fatty Acids	FFA	Serum/Plasma	EDTA	3.5		
Glucose	GLUC	Serum/Plasma/Urine	LiHep/EDTA/NaF	2	+	Separation in 30 min after sampling, refrigerate/freeze directly • Fasted samples preferred - Highly dependant on temperature, bacterial contamination and glycolysis
Glycerol	GLY					
γ-Glutamyl Transferase	GGT	Serum/Plasma	LiHep/EDTA	3		EDTA values are approx. 6% lower than serum values
β-Hydroxybutyrate	HBA	Serum/Plasma	LiHep/EDTA	3		
Iron	IRON	Serum/Plasma	LiHep	8.5	+++	Separation within one hour
Lactate	LACT	Plasma	NaF-LiHep	2	+	Separate plasma and freeze samples as soon as possible, within 15 minutes • Increased by physical effort and glycolysis / Avoid lipemia
Lactate Dehydrogenase	LDH	Serum/Plasma	LiHep	4	+++	
Lipase - Pancreatic	LIP	Serum/Plasma	LiHep	2		
Magnesium	MAG	Serum/Plasma/Urine	LiHep	2	+	Special treatment for urine samples
Phosphate	PHOS	Serum/Plasma/Urine	LiHep/EDTA	2.5	+	Special treatment for urine samples
Total Protein	TP	Serum/Plasma	LiHep/EDTA	2		
Triglycerides	TG	Serum/Plasma	LiHep/EDTA	2		Lower EDTA concentration (1/2 of indicated concentration) may cause a negative bias for TG
Urea / BUN	BUN	Serum/Plasma/Urine	LiHep/EDTA	2		
Uric Acid	UA	Serum/Plasma	LiHep/EDTA	3		EDTA values are approx. 7% lower than serum values - Special treatment for urine samples