



Total bile acids 21 FS*

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of total bile acids in serum on DiaSys respons[®]910 VET

Order Information

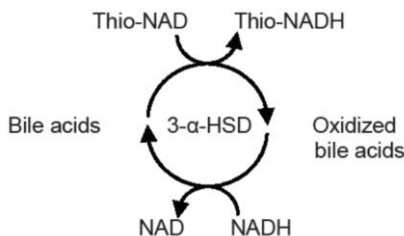
Cat. No. 1 2238 99 11 921

4 twin containers for 50 tests each

Method

Enzymatic cycling method

Two reactions are combined in the new generation enzymatic cycling method. In the presence of Thio-NAD, the enzyme 3- α -hydroxysteroid dehydrogenase (3- α -HSD) converts bile acids to 3-ketosteroids and Thio-NADH. The reaction is reversible and 3- α -HSD can convert 3-ketosteroids and NADH to bile acids and NAD. In the presence of excess NADH, the enzyme cycling occurs efficiently and the rate of formation of Thio-NADH is determined by measuring the specific change of absorbance at 405 nm. This cycling reaction leads to significant signal amplification.



Reagents

Components and Concentrations

R1:	Buffer	
	Thio-NAD	> 0.1 mmol/L
R2:	Buffer	
	3- α -HSD	> 2 KU/L

Storage and Reagent Stability

The reagents are stable up to the end of the indicated month of expiry, if stored at 35.6 – 46.4°F and contamination is avoided. Do not freeze the reagents and protect them from light.

Warnings and Precautions

1. Reagent 2 contains sodium azide (0.95 g/L) as preservative. Do not swallow! Avoid contact with skin and mucous membranes.
2. In very rare cases, samples of animals with gammopathy might give falsified results.
3. Please refer to the safety data sheets and take the necessary precautions for the use of laboratory reagents. For diagnostic purposes, the results should always be assessed with the animal's medical history, clinical examinations and other findings.
4. For professional use only.

Waste Management

Refer to local legal requirements.

Reagent Preparation

The reagents are ready to use. The bottles are placed directly onto the reagent trays.

Materials Required

General laboratory equipment

Specimen

Serum is preferred, heparinized plasma is acceptable

Samples from patients under bile acid analogues treatment such as fusidic acid, ursodeoxycholic acid or obeticholic acid are unsuitable for analysis.

Stability:

2 days at 39.2 – 46.4°F

Discard contaminated specimens.

Calibrators and Controls

DiaSys TruCal TBA calibrator is recommended for calibration. The assigned values of the calibrator have been made traceable to a commercially available measurement procedure. Use DiaSys TruLab N and P for internal quality control. Each laboratory should establish corrective action in case of deviations in control recovery.

	Cat. No.	Kit size
TruCal TBA	1 2240 99 11 037	3 x 1 mL
TruLab N	5 9000 99 11 061	20 x 5 mL
TruLab P	5 9050 99 11 062	20 x 5 mL

Performance Characteristics

The performance characteristics were evaluated with human samples and might differ from results obtained with various animal specimens.





Measuring range up to 200 μ mol/L total bile acids (in case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).	
Limit of detection**	2 μ mol/L
On-board stability	14 days with chimneys
Calibration stability	7 days with chimneys

Interfering substance	Interferences \leq 10% up to	Total bile acids [μ mol/L]
Ascorbic acid	100 mg/dL	9.42
	100 mg/dL	24.0
Hemoglobin	1000 mg/dL	8.75
	1000 mg/dL	26.5
Bilirubin (conjugated)	60 mg/dL	9.37
	60 mg/dL	26.1
Bilirubin (unconjugated)	21 mg/dL	8.99
	35 mg/dL	26.3
Lipemia (triglycerides)	600 mg/dL	8.99
	2000 mg/dL	29.0
Sulfapyridine	350 mg/L	8.84
	350 mg/L	28.1
Sulfasalazine	350 mg/L	7.38
	350 mg/L	26.2
Temozolomide	30 mg/L	8.43
	30 mg/L	27.8

For further information on interfering substances refer to Young DS. Effects of Drugs on Clinical Laboratory Tests. 5th. ed. Volume 1 and 2. Washington, DC: The American Association for Clinical Chemistry Press, 2000.

** according to CLSI document EP17-A2, Vol. 32, No. 8

Reference Range

				
DOG	CAT	HORSE	CATTLE	Unit
****	****	2 – 10****	22 – 247****	µmol/L

Source:

***: Cornell University, College of Veterinary Medicine.

****: Variable, depending on reason for screening, fasting vs. non-fasting, age, etc.

Each laboratory should check if the reference ranges are transferable to its own animal population and determine own reference ranges if necessary.

Manufacturer

DiaSys Diagnostic Systems GmbH
Alte Strasse 9 65558 Holzheim Germany