



Bilirubin Auto Total FS*

Order Information

Cat. No. 1 0811 99 11 920
Kit size 800 (4 x 200)

Intended Use

Diagnostic reagent for quantitative in vitro determination of total bilirubin in serum or heparin plasma on automated DiaSys respons[®]910 VET.

For veterinary use only.

Method

Photometric test using 2,4-dichloroaniline (DCA)

Direct bilirubin in presence of diazotized 2,4-dichloroaniline forms a red colored azocompound in acidic solution. A specific mixture of detergents enables a safe determination of the total bilirubin.

Reagents

Components and Concentrations

R1: Phosphate buffer 50 mmol/L
 NaCl 150 mmol/L
R2: 2,4-Dichloroaniline 5 mmol/L
 HCl 130 mmol/L

Storage and Stability

Reagents are stable up to the date of expiry indicated on the kit, 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

- Reagent 1: Danger. H290 May be corrosive to metals. H315 Causes skin irritation. H318 Causes serious eye damage. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. P234 Keep only in original container. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection. P302+352 If on skin: Wash with plenty of water/soap. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a poison center/doctor. P391 Collect spillage.
- Reagent 2: Warning. H290 May be corrosive to metals. H319 Causes serious eye irritation. P234 Keep only in original container. P280 Wear protective gloves/protective clothing/eye protection. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P390 Absorb spillage to prevent material damage.
- In very rare cases, samples of animals with gammopathy might give falsified results.
- Take special care to avoid contamination and carry-over, particularly in combination with Rheumatoid factor FS.
- 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.
- For professional use only.

Waste Management

Refer to local legal requirements.

Reagent Preparation

The reagents are ready to use. The bottles are placed directly into the reagent rotor.

Materials Required

General laboratory equipment

Specimen

Serum or heparin plasma

Protect sample from light.

Stability:

2 days at 39.2 – 46.4°F

Discard contaminated specimens.

Calibrators and Controls

DiaSys TruCal U is recommended for calibration. TruCal U calibrator values have been made traceable to the NIST SRM 916 reference material. 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 U	5 9100 99 11 063	20 x 3 mL
TruLab N	5 9000 99 11 062	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 specimen.

Measuring range up to 30 mg/dL. In case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function.	
Limit of detection**	0.11 mg/dL
Onboard stability	4 weeks
Calibration stability	3 days

Interfering substance	Interferences ≤ 10% up to	Analyte concentration [mg/dL]
Ascorbate	30 mg/dL	2.26
Hemoglobin	100 mg/dL	1.17
	500 mg/dL	15.2
Lipemia (triglycerides)	1000 mg/dL	1.29
	2000 mg/dL	13.3
Naproxen	1 mmol/L	0.46

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-A, Vol. 24, No. 34

Conversion Factor

Bilirubin [mg/dL] x 17.1 = Bilirubin [µmol/L]

Reference Range

DOG	CAT	HORSE	CATTLE	Unit
0.1 - 0.5	0.0 - 0.4	0.6 - 2.0	0.1 - 0.5	mg/dL

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

Source:

Reference ranges have been validated by DiaSys USA according to National Reference Laboratory standards.

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* Fluid Stable