



# Bilirubin Auto Direct FS\*

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of direct bilirubin in serum or plasma on DiaSys respons<sup>®</sup>910 VET

## Order Information

Cat. No. 1 0821 99 11 920

4 twin containers for 200 tests each

## Method

Photometric test using 2,4-dichloroaniline (DCA)

## Principle

Direct bilirubin in presence of diazotized 2,4-dichloroaniline forms a red colored azocompound in acidic solution.

## Reagents

### Components and Concentrations

<b>R1:</b>	EDTA-Na <sub>2</sub>	0.1 mmol/L
	NaCl	150 mmol/L
	Sulfamic acid	100 mmol/L
<b>R2:</b>	2,4-Dichlorophenyl-diazonium salt	0.5 mmol/L
	HCl	900 mmol/L
	EDTA-Na <sub>2</sub>	0.13 mmol/L

### Storage Instructions and Reagent Stability

The reagents are stable up to the end of the indicated month of expiry, if stored 35.6 – 46.4°F, protected from light and contamination is avoided. DiaSys respons containers provide protection from light. Do not freeze the reagents.

### Warnings and Precautions

1. Reagent 1: Warning. H290 May be corrosive to metals. P234 Keep only in original container. P390 Absorb spillage to prevent material damage.
2. Reagent 2: Danger. H290 May be corrosive to metals. H315 Causes skin irritation. H318 Causes serious eye damage. P234 Keep only in original container. P280 Wear protective gloves/protective clothing/eye protection. P302+P352 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 or doctor/physician. P390 Absorb spillage to prevent material damage.
3. In very rare cases, samples of animals with gammopathy might give falsified results.
4. To avoid contamination and carryover, special care should be taken in combination with Rheumatoid factor FS reagent.
5. 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.
6. For professional use only!

### Waste Management

Please refer to local legal requirements.

### Reagent Preparation

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

### Specimen

Serum or heparin plasma

It is very important to store the samples protected from light!

Stability :

2 days at 39.2°F to 46.4°F

Discard contaminated specimens.

## Calibrators and Controls

For calibration, DiaSys TruCal U calibrator is recommended. This method has been standardized against the manual Jendrassik-Gróf test. For internal quality control DiaSys TruLab N and P controls should be assayed. 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 7 mg/dL bilirubin (in case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).	
Limit of detection**	0.1 mg/dL direct bilirubin
On-board stability	6 weeks
Calibration stability	3 weeks

Interfering substance	Interferences < 10%	Direct bilirubin [mg/dL]
Ascorbate	up to 30 mg/dL	2.16
Naproxen	up to 1 mmol/L	0.15
Hemoglobin	< 5 mg/dL	0.27
	up to 25 mg/dL	5.35
Lipemia (triglycerides)	up to 400 mg/dL	0.44
	up to 2000 mg/dL	4.80





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 NCCLS document EP17-A, vol. 24, no. 34

## Conversion Factor

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

## Reference Range

				Unit
DOG	CAT	HORSE	CATTLE	
0.0 – 0.1	0.0 – 0.1	0.3 – 0.7	0.0 – 0.1	mg/dL

Source:

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

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

## Manufacturer

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