



Urea FS*

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of urea in serum, plasma on DiaSys respons[®]910 VET

Order Information

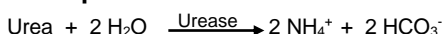
Cat. No. 1 3101 99 11 920

4 twin containers for 200 tests each

Method

"Urease - GLDH": enzymatic UV test

Principle



GLDH: Glutamate dehydrogenase

Reagents

Components and Concentrations

R1:	TRIS	pH 7.8	150 mmol/L
	2-Oxoglutarate		9 mmol/L
	ADP		0.75 mmol/L
	Urease		≥ 7 kU/L
	GLDH (Glutamate dehydrogenase, bovine)		≥ 1 kU/L
R2:	NADH		1.3 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

- The reagents contain sodium azide (0.95 g/L) as preservative. Do not swallow! Avoid contact with skin and mucous membranes.
- Reagent 1 contains animal material. Handle the product as potentially infectious according to universal precautions and good laboratory practice.
- In very rare cases, samples of animals with gammopathy might give falsified results.
- 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

Please refer to local legal requirements.

Reagent Preparation

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

Specimen

Serum, plasma (no ammonium heparin!)

Stability :

2 days at 39.2°F to 46.4°F

Discard contaminated specimens.

Calibrators and Controls

For calibration, the DiaSys TruCal U calibrator is recommended. The assigned values of the calibrator have been made traceable to the reference material NIST SRM-909 level 1. 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 300 mg/dL urea in serum (in case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).	
Limit of detection**	3 mg/dL urea
On-board stability	4 weeks
Calibration stability	7 days

Interfering substance	Interferences (serum) < 10%	Urea [mg/dL]
Ascorbate	up to 30 mg/dL	89.7
Hemoglobin	up to 500 mg/dL	9.60
	up to 550 mg/dL	38.6
Bilirubin, conjugated	up to 65 mg/dL	9.03
	up to 70 mg/dL	39.9
Bilirubin, unconjugated	up to 70 mg/dL	9.28
	up to 65 mg/dL	42.2
Lipemia (triglycerides)	up to 1000 mg/dL	10.5
	up to 1900 mg/dL	41.0

Ammonium ions interfere; therefore, do not use ammonium heparin as anticoagulant for collection of plasma!

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





Urea [mg/dL] x 0.1665 = Urea [mmol/L]

Urea [mg/dL] x 0.467 = BUN [mg/dL]

BUN [mg/dL] x 2.14 = Urea [mg/dL] (BUN = Blood urea nitrogen)

Reference Range

BUN in serum/plasma

				Unit
DOG	CAT	HORSE	CATTLE	
9 – 27	19 – 34	11 – 25	8 – 21	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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