



ALAT (GPT) FS* (IFCC mod.)

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of ALAT (GPT) in serum or plasma on DiaSys respons[®]910 VET

Order Information

Cat. No. 1 2701 99 11 920

4 twin containers for 200 tests each

Method

Optimized UV-test according to IFCC (International Federation of Clinical Chemistry and Laboratory Medicine) [modified]

Principle

L-Alanine + 2-Oxoglutarate $\xleftrightarrow{\text{ALAT}}$ L-Glutamate + Pyruvate

Pyruvate + NADH + H⁺ $\xleftrightarrow{\text{LDH}}$ D-Lactate + NAD⁺

Reagents

Components and Concentrations

R1:	TRIS	pH 7.15	140 mmol/L
	L-Alanine		700 mmol/L
	LDH (lactate dehydrogenase)		≥ 2300 U/L
R2:	2-Oxoglutarate		85 mmol/L
	NADH		1 mmol/L

Storage Instructions 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, 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 clinical laboratory practices.
- In very rare cases, samples of animals with gammopathy might give falsified results.
- Sulfasalazine and sulfapyridine medication may lead to false results in patient samples. Blood collection must be done before drug administration.
- Please refer to the safety data sheets and take the necessary precautions for use of laboratory reagents. For diagnostic purposes, 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 onto the reagent rotor.

Specimen

Serum, heparin plasma or EDTA plasma

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 original IFCC formulation (molar extinction coefficient 340 nm). 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 600 U/L ALAT (in case of higher activities re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).	
Limit of detection**	3 U/L ALAT
On-board stability	4 weeks
Calibration stability	4 weeks

Interfering substance	Interferences < 10%	ALAT [U/L]
Ascorbate	up to 30 mg/dL	81.1
Hemoglobin	up to 500 mg/dL	36.0
Bilirubin, conjugated	up to 850 mg/dL	78.1
	up to 55 mg/dL	46.7
Bilirubin, unconjugated	up to 45 mg/dL	70.3
	up to 45 mg/dL	33.5
Lipemia (triglycerides)	up to 1000 mg/dL	63.5
	up to 1000 mg/dL	40.3
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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

ALAT [U/L] x 0.0167 = ALAT [µkat/L]

Reference Range

		
DOG	CAT	Unit
24 – 97	33 – 119	U/L

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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