



Gamma-GT FS* Szasz mod./IFCC stand.

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of gamma-glutamyltransferase (gamma-GT) in serum or plasma on DiaSys respons[®]910 VET

Order Information

Cat. No. 1 2801 99 11 920

4 twin containers for 200 tests each

Method

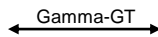
Kinetic photometric test according to Szasz/Persijn. The test has also been standardized to the method according to IFCC (International Federation of Clinical Chemistry). Results according to IFCC are obtained using the calibrator value given for the IFCC method.

Principle

Gamma-GT catalyzes the transfer of glutamic acid to acceptors like glycylglycine in this case.

This process releases 5-amino-2-nitrobenzoate which can be measured at 405 nm. The increase in absorbance at this wavelength is directly related to the activity of gamma-GT.

L-Gamma-glutamyl-3-carboxy-4-nitranilide + Glycylglycine



Gamma-glutamyl-glycylglycine + 5-Amino-2-nitrobenzoate

Reagents

Components and Concentrations

R1:	TRIS	pH 8.28	135 mmol/L
	Glycylglycine		135 mmol/L
R2:	L-Gamma-glutamyl-3- carboxy-4-nitroanilide	pH 6.00	22 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 and contamination is avoided. Do not freeze the reagents! Reagents must be protected from light. DiaSys respons containers provide protection from light.

Warnings and Precautions

1. The reagents contain 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

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 or heparin plasma

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. In case TruCal U is used as a calibrator, use the according calibrator value for the Szasz method respectively for the IFCC method. For calculation according to IFCC, standardization was performed against the original IFCC formulation. 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 1200 U/L gamma-GT (in case of higher activities re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).	
Limit of detection**	2 U/L gamma-GT
On-board stability	4 weeks
Calibration stability	7 days

Interfering substance	Interferences < 10%	GGT [U/L]
Ascorbate	up to 30 mg/dL	43.8
Hemoglobin	up to 150 mg/dL	42.0
	up to 600 mg/dL	87.9
Bilirubin, conjugated	up to 40 mg/dL	43.9
	up to 40 mg/dL	124
Bilirubin, unconjugated	up to 40 mg/dL	44.7
	up to 40 mg/dL	120
Lipemia (triglycerides)	up to 2000 mg/dL	41.9
	up to 2000 mg/dL	116





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:

GGT [U/L] x 0.0167 = GGT [µkat/L]

Reference Range

				Unit
DOG	CAT	HORSE	CATTLE	U/L
1 – 10	1 – 10 *	5 – 21	8 – 63	

Source:

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

* Estimated:

Source: Diagnostic Center for Population and Animal Health; Clinical Pathology Laboratory; Michigan State University East Lansing.

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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