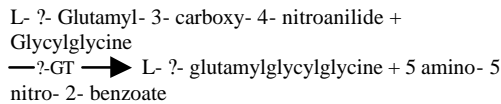


GAMMA – GT

KINETIC TEST ACC. SZASZ '74

Principle:

Kinetic determination of γ GT using L- γ - glutamyl- 3- carboxy- 4- nitroanilide as substrate. The reaction is as follows:



The increase of the absorbance at 405nm, due to the formation of the 4- nitroaniline, is proportional to the γ GT activity.

Reagent Concentration:

Buffer: TRIS Buffer pH 8.25 100mmol/l
 Substrate: Glycylglycine 100mmol/l
 L- γ - Glutamyl- 3- carboxy- 4- nitroanilide 3mmol/l

Preparation and Stability of solutions

Dilute substrate reagent /R2 with the corresponding volume of buffer /R1.

Gently swirl until completely dissolved.

DO NOT SHAKE!

This working reagent is stable:

5 days at 20 -25°C or 21 days at 2 - 8°C.

Samples:

Serum only, do not use plasma.. the γ GT is stable for 8 hours at 20 – 25 °C, 5 days at -20°C

Procedure:

Wavelength: 405nm (400-420nm)
 Temperature: +25 / +30 / +37°C
 Cuvette: 1cm light path
 Zeroadjustment: air or distilled water

	Macro	Semi	Micro
Working reagent	2000 μ l	1000 μ l	500 μ l
Standard/R4	200 μ l	100 μ l	50 μ l

Mix, wait 1 minute. Read initial absorbance and start stopwatch simultaneously. Read again after exactly 1, 2 and 3 minutes.

Calculation:

	Macro	Semi	Micro
405nm γ A/min x	x1190	x1190	x1190

Linearity:

The method is linear up to 250 U/l.

In case of higher results, dilute sample 1:10 with saline solution and repeat test. Multiply result by 10.

Normal Values:

	+25°C	+30°C	+37°C
Men	6-28 U/l	8-38 U/l	11-50 U/l
Women	4-18 U/l	5-25 U/l	7-32 U/l

Notes:

Citrated, oxalated and EDTA-plasma cannot be used in this test.

Haemolysis will interfere.

Quality Control:

For accuracy and reproducibility control:-

Assayed Multi-Sera Normal and Elevated.

For reproducibility control:-

Multi-Sera Low, Normal and Elevated.

Presentation:

#GGT0221, 12 x 10ml

Buffer: 1 x 120ml

Substrate reagent 12 x 10ml.

Safety precautions:

For in vitro diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Solutions may contain Sodium Azide. Avoid ingestion or contact with skin or mucous membranes. In case of skin contact, flush affected area with copious amounts of water. In case of contact with eyes or if ingested, seek immediate medical attention.

Sodium Azide reacts with lead and copper plumbing, to form potentially explosive azides. When disposing of such reagents flush with large volumes of water to prevent azide build up. Exposed metal surfaces should be cleaned with 10% sodium hydroxide.

Health and Safety data sheets are available on request.

Literature:

Szasz, G., Clin. Chem. 15, 124 (1969)

Szasz, G et al, Clin Chem. Clin. Biochem.12, 228 (1974)

Lum, G. and S. R. Clin. Chem. 18, 358 (1972)