

BioMed-GOT

(ASAT/AST/GOT)-Colorimetric, Endpoint



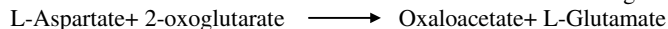
REF: GOT110120 (2x60 ml)
GOT110240 (2x120 ml)

INTENDED FOR USE

For quantitative determination of AST in serum and plasma

PRINCIPLE :

The colorimetric determination of AST is based on the following reaction:



Oxaloacetate formed reacts with 2,4-dinitrophenylhydrazine to yield a colored hydrazone that can be measured at 546 nm (530-550).

SPECIMEN COLLECTION:

Non hemolyzed serum .

AST/GOT in serum is reported stable up to 4 days at +15-25°C , 10 days at +2-8°C and 3 weeks if frozen at -20°C .

Shake and bring the samples at room temperature (+15-25°C) before using .

REAGENTS COMPOSITION :

R1	Phosphate buffer pH 7.4 L-Aspartate 2-Oxoglutarate	100 mmol/l 100 mmol/l 4.0 mmol/l
R2	2,4-dinitrophenylhydrazine	2.0 mmol/l
R3	NaOH	0.4 mol/l

PACKAGE : Collection & Storage .

Store at +2-8°C .

Stable until the expiration date reported upon the package.

After the unsealing and the taking of the reagent , it is advised to close up the bottle immediately in order to avoid evaporation , direct light exposure and bacterial contamination .

PRECAUTIONS & WARNING

Avoid pipetting by mouth .

The preparation , according to current regulation . is classified as not dangerous.

The total concentration of non active components (preservatives , detergents ,stabilizers) is below the minimum required for citation .

Anyway handle with care , avoid ingestion , avoid contact with eyes , skin and mucous membranes

The samples must be handle as potentially infected from HIV or Hepatitis

REAGENT PREPARATION & STABILITY :

Liquid reagents must be at room temperature (+15-25°C) before using .

Ready to use liquid reagents and stable up to expiry date given on label when stored at 2 – 8 C. The sodium hydroxide reagent (R3) should be completed to 1 liter before use.

REQUIRED MATERIALS NOT PROVIDED :

General Laboratory Equipment and instrumentations .

PROCEDURE :

Wavelength 546 nm (530 - 550 nm)
Optical path 1 cm
Incubation temperature 37°C
Measurement against Reagent blank

Pipette into test tubes		
	Blank	Specimen
Specimen	—	0.1 ml
Reagent 1	0.5 ml	0.5 ml
Dist. Water	0.1 ml	—
Mix, incubate for exactly 30 minutes at 37°C.		
Reagent 2	0.5 ml	0.5 ml
Mix, allow standing for exactly 20 minutes at 20-25°C.		
NaOH (0.4 mol/l)	5.0 ml	5.0 ml
Mix, read the absorbance of specimen (A_{specimen}) against the reagent blank after 5 minutes. The color intensity is stable for 1 hour.		

CALCULATION :

Obtain the activity of GOT in the serum from the table.

Absorbance	U/l	Absorbance	U/l
0.020	7	0.100	36
0.030	10	0.110	41
0.040	13	0.120	47
0.050	16	0.130	52
0.060	19	0.140	59
0.070	23	0.150	67
0.080	27	0.160	76
0.090	31	0.170	89

EXPECTED VALUES :

Serum Up to 12 U/l

The above mentioned values are to be considered as a reference.

It is strongly recommended that each laboratory establish its own normal range

WASTE DISPOSAL :

The disposal of the product must be in accordance with local regulation concerning waste disposal .

QUALITY CONTROL :

It is recommended to execute the quality control at every kit utilization to verify that values are within the reference range indicated by the methodology.

REFERENCES :

1. Tietz, N.W. (ed) Fundamentals of Clinical Chemistry W.B. Saunders Co., Philadelphia, 1976.
2. Henry, R.J., Clinical Chemistry, Principles and Technics. Harper and Row Publishers. New York, 1964.
3. Provisional Recommendations on IFCC methods for the measurement of catalytic concentrations enzymes. Clin chem. 23(887), 1977.

PERFORMANCE :

MEASURE INTERVAL :	7-89 U/L
MEASURABLE LIMIT :	3 U/L
SENSITIVITY :	7 U/L= 0.0017 ΔE/min.

INTERFERENCE:






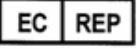



Interferences are negligible up to :			
Bilirubin	18 mg/dL	Triglycerides	500 mg/dL
Hemoglobin	300 mg/dL	Glucose	500 mg/dL



METHOD LIMITATIONS:

For concentration higher than 89 U/L repeat the measure on a sample diluted 1:2 with physiological solution and multiply the results by 2 .

Hemolyzed sample may provide elevated readings due to AST presence in erythrocytes . individuals lacking B6 vitamin may present lowest level , probably due to pirid-oxalic-phosphate absence .

For through evaluation of the interfering substances ,consult : Young , D. S ,et al , Clin , Chem , 21:1 D (1975) .

	Consult Instructions for Use
	Caution, consult accompanying Documents
	In Vitro Diagnostic Medical Device
	Temperature limitation
	Manufacturer
	Authorized Representative in the European Community
	Catalogue number
	Batch code
	Use by

 Egy-Chem for lab technology	 
Head Office: 83 Abdel-Hamid Badawy St.Heliopolise, Cairo, Egypt Tel :202- 26236727 / 202- 26236598 Fax :202- 26240986 Website: www.egy-chem.com E-mail: sales@egy-chem.com or sales@egy-chem.net	MDSS GmbH Schiffgraben 41 30175 Hannover, Germany