

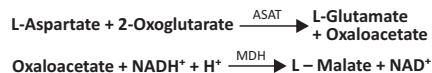
In-vitro Diagnostic reagent kit for quantitative determination of Glutamic Oxaloacetic Transaminase/ Aspartate Transaminase (GOT/ASAT) in serum/plasma sample on Photometric System.

Cat no.	Kit Configuration
LG119-100	Reagent R1 - 2 x 40mL Reagent R2 - 2 x 10mL
LG119-500	Reagent R1 - 1 x 400mL Reagent R2 - 1 x 100mL
LG119-1000	Reagent R1 - 2 x 400mL Reagent R2 - 2 x 100mL

Reagent 1: Enzyme Solution
Reagent 2: Buffer Solution

Aspartate aminotransferase (ASAT) is an enzyme found primarily in the liver and kidney. It was originally referred to as serum glutamic oxaloacetic transaminase (SGOT). Normally, a low level of ASAT exists in the serum. ASAT is increased with liver damage and is used to screen for and/or monitor liver disease. Aspartate aminotransferase (ASAT) is usually measured concurrently with ALAT as part of a liver function panel to determine the source of organ damage.

The rate of NADH consumption is measured photometrically and is directly proportional to the ASAT concentration in the sample.



Reagents are stable up to the end of the indicated month of expiry, if stored at 2° – 8°C, protected from light and contamination is avoided. Do not freeze the reagents!

TRIS buffer pH 7.8 25.2 g/L, L - Aspartate 24. g/L, MDH (Malate dehydrogenase) ≥ 600 U/L, LDH (lactate dehydrogenase) ≥ 1200 U/L, 2-Keto glutaric acid 7.9 g/L, NADH 1.1 g/L

Please refer to local legal requirements.

Mix, 4 parts of reagent 1 and 1 part of reagent 2 = working reagent. The stability of the working reagent is 5 days at 15°-25°C. 4 weeks at 2° - 8°C. Protect the reaction solution from light.

NaCl solution 9 g/L.
General laboratory equipment

Serum, heparin, plasma or EDTA plasma separate at the latest 1h after blood collection from cellular contents.

7 days	at	2°-8 °C
30 days	at	-20 °C

Only freeze once! Discard contaminated specimens.

Wavelength : 340 nm
Optical Path : 10 mm
Temperature : 37°C

Working Reagent	1000 µL
Sample	100 µL

Mix and incubate for 1 min. and read absorbance after every 1 min. for 3 min.

$\Delta A/\text{min}$ and multiply by the corresponding factor from table below: ASAT activity U/L = $\Delta A/\text{min} \times \text{factor (1745)}$

For internal quality control any normal and abnormal controls should be assayed with each batch of samples.
Each laboratory should establish corrective action in case of deviations in control recovery.

- Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Take off immediately all contaminated clothing.
- The reagents contain sodium azide (0.95 g/L) as preservative. Do not swallow. Avoid contact with skin and mucous membranes.
- For professional use only!

The test has been developed to determine GOT/ASAT activities within a measuring range from 5 - 800 U/L. If such value is exceeded the sample should be diluted 1 + 9 with NaCl solution (9 g/L) and results multiplied by 10.

Linearity of detection is 800 U/L.

The lower limit of detection is 5 U/L.

No interference was observed by, Ascorbic acid upto 30 mg/dL, Bilirubin upto 40 mg/dL and Triglycerides upto 2000 mg/dL.

Intra assay n=20	Mean (U/L)	SD (U/L)	CV (%)
Sample 1	35.72	0.49	1.38
Sample 2	46.41	0.44	0.94
Sample 3	168.10	0.67	0.40

Inter assay n=20	Mean (U/L)	SD (U/L)	CV (%)
Sample 1	36.36	0.33	0.90
Sample 2	47.17	0.41	0.87
Sample 3	172.43	1.12	0.65

A comparison of precision biomed GOT/ASAT (y) with a commercially available test (x) using 15 samples gave following results:
 $y = 1.024x - 1.406$; $r^2 = 0.997$

Mode	Kinetic
Reaction slop	Decreasing
Wavelength	340 nm
Path length	10 mm
Temperature	37°C
Working reagent	4 part Reagent 1
	1 Part Reagent 2
Working reagent Volume	1000 µL
Sample volume	100 µL
Delay	60 sec
Rate	60 sec
No. of readings	3
Factor	1745
Normal range	Male: < 37 U/L
	Female: < 31 U/L
Linearity	800 U/L
Sensitivity	5 U/L

Adults	
Men	< 37 U/L
Women	< 31 U/L

Note: It is recommended that each laboratory should establish its own reference range based on the patient population.

1. 1st ed. Frankfurt: TH-Books Verlagsgesellschaft; 1998. p.55-65.
2. Textbook of clinical chemistry. 3rd ed.
3. Philadelphia: W.B saunders company; 1999. p.617-72 . 4. Clin Chem Lab Med 2002; 40:718-24.
4. Association for Clinical Biochemistry and Laboratory Medicine. Retrieved 7 October 2013.
5. Central Pollution Control Board (CPCB) Guidelines for Management of healthcare waste as per Biomedical Waste Management rules, 2016.

	International Organization or Standardization		Keep out of Sunlight
	Manufacturer		For invitro diagnostic use only
	Expiry date		Read product insert before use.
	Lot (batch) number		Do not use if package is damaged
	Store between 2-8°C		Keep Away From Moisture
ART/IFU/PRC-119-01			

Manufactured by:
LABGENE BIO-TECH PVT. LTD.
GF, Plot no 13, 14, Kamla Amrut Inditech Park,
Chhatral- Kadi Road, Indrad, Kadi, Mahesana, Gujarat
382715
Mobile : +91 97 27 37 9000
Email: info@labgene.in
Web: www.labgene.in

“Thanks for you”