

SGPT

Liquid Reagent Kinetic determination . IFCC Store at 2-8°C

PRINCIPLE

Kinetic determination of alanin Amino transferase based upon IFCC recommendations.

L - Alanine + oxoglutarate
Pyruvate + L.Glutamate
Pyruvate + NADH + H
L.lactate + NAD⁺

The rate of NADH consumption is directly proportional to the SGPT activity in the sample.

REFERENCE VALUES

Temperatu	ire	25°C	30°C	37°C
GPT U/I	Men	7-23	8-34	10-56
	Women	6-19	7-28	9-39

This ranges are given for orientation only each laboratory should establish its own normal range

SAMPLES

Serum free of hemolysis. Heparin plasma. Loss of activity within 3days.

REAGENTS				
$R_{1:}$				
Tris buffer	100 mmol/l			
L - Alanine	500 mmol/l			
2- Oxoglutarate	15 mmol/l			
LDH	2000 U/I			
R ₂ :	_			
NADH	0.24 mmol/l			

PREPARATION OF WORKING REAGENT PREPARATION OF WORKING REAGENT

Reagent R1 and R2 are ready to use. If a monoreagent procedure is preferred then the reagent must be mixed in the ration 4 parts of R1 to 1 part of R2. The working reagent is stable for one month at 2-8°C

PROCEDURE

If the absorbance of working reagent is lower than 1.1 at 334nm the reagent can not be used.

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Wavelength	340 nm		
Temperature	25°C/30°C/37°C		
Zero adjustment	Air		
Cuvette	1 cm light path		
Method	Kinetic - Decreasing		

Sample	0.1 ml
Working reagent	1.0 ml

Mix and after one minute incubation measure the change of optical density per minute (Δ O.D/min.) during 3 minutes.

CALCULATION

 $U/L = \Delta O.D./min X 1742$

LINEARITY

Up to 279 U/l. If the (Δ O.D/min.)_exceeds 0.16 repeat the test using diluted simple with saline solution

QUALITY CONTROL

All control sera with SGPT values determined by this method may be employed.

NOTS

The reagent contain NaN3, Do not swallow avoid contact with skin and mucous membranes. Chelating agents (EDTA) interfere with the reaction.

SPECIFICATION

Bilirubine 0.15g/l, lipid 10g/l, glucose 10g/l and ascorbic acid 0.5g/l don't interfere with the assay up to the given levels.

	PRESENTATION	
50 ml	Cat No 0501	60 Tests
60x3 ml	Cat No 0502	180 Tests

BIBLIOGRAPHY

- Internal. Federation of clinical Chemistry, Scientific committee, Clin. Chem., 23, 887 (1977).
- Bergmyer, Schaibe and Wahlefeld, Clin. Chim., 24. 58 (1978).

The following symbols are used on labels

IVD

For in vitro diagnostic use



Use day (last day of the month)



Temperature limitation

LUI Batch code

REF Code