



ALAT

DETERMINATION OF ALANINE AMINOTRANSFERASE (EC 2.6.1.2) ACCORDING THE RECOMMENDATIONS OF THE IFCC

- IFCC Method (EC 2.6.1.2)
- Instrument Application Sheets Available
- Startreagent procedure
- Use Serum or Plasma
- Wavelength 340, 334, 365 nm



Products	Product no.	Quantity
ALAT Buffer	2263	6 x 100 ml
ALAT Reagent	2351	10 x 100 ml
ALAT Startreagent	2265	10 x 30 ml
Pyridoxal phosphate	2353	10 x 1 ml

SUMMARY

PRINCIPLE

L – Alanine + α - Ketoglutarate $\xrightarrow{\text{ALAT}}$ L – Glutamate + Pyruvate

Pyruvate + NADH + H⁺ $\xrightarrow{\text{LD}}$ Lactate + NAD⁺

The rate of NADH conversion is monitored continuously at 334, 340 or 366 nm.

METHOD

ALAT Working Reagent: Dissolve and mix the contents of one vial ALAT Reagent (2351) in 100 ml ALAT Buffer (2263). The stability of this working reagent is at least 2 weeks at 2-6 °C and 1 month at -20 °C.

When Pyridoxal phosphate (2353) is used, dissolve the contents of one vial in 1.0 ml distilled water (stability is 1 month at 2-6 °C) and add 0.1 ml pyridoxal phosphate solution per 10 ml ALAT Working Reagent. The stability of this working reagent is at least 1 week at 2-6 °C and 1 month at -20 °C.

LINEARITY

If activities exceed 200 U/l mix 50 μ l sample with 100 μ l saline (9 g/l NaCl). Multiply result by 3.

SAMPLE MATERIAL

Serum, plasma. Erythrocytes contains relatively small amounts of ALAT. Minimal haemolyses can therefore be tolerated. Serum is stable without loss of ALAT activity for at least 1 week at 2-6 °C.

EXPECTED VALUES

Male:	Up to 30 U/l	500 nkat/l	with pyridoxal phosphate
Male:	Up to 29 U/l	483 nkat/l	without pyridoxal phosphate
Female:	Up to 25 U/l	417 nkat/l	with pyridoxal phosphate
Female:	Up to 22 U/l	367 nkat/l	without pyridoxal phosphate

NOTES

1. For in vitro diagnostic use only.
2. For professional use only.
3. Always contact INstru**chemie** for the complete product insert and latest edition.
4. Printed in the Netherlands, ALAT-summary-280725-1.FEN