



α Amylase

Stable Liquid Reagent
Kinetic determination
Store at 2-8°C

PRINCIPLE

Reagent for the quantitative determination of alpha-amylase in serum using a new substrate Gal-G2-α-CNP (2-chloro-4 nitrophenyl-α-galactosylmaltoside). The rate at which nitrophenol is formed is directly proportional to the amylase activity in the sample.

REFERENCE VALUES

Serum: Up to 90 U/L of α amylase
Urine: Up to 450 of α amylase
Expected values may vary with age, Sex, Diet and geographical location..
It is recommended that each laboratory should assign its own normal range.

SAMPLES

Serum free of hemolysis. Heparin plasma.
Urine collected in clean and dry equipments and keep at 2-8°C.
Amylase is stable in serum for one week stored at 2-8°C, Chelating agents interfere with the reaction.
Salivary and pancreatic amylase are both measured by this procedure. Do not pipette reagent or sample by mouth.

REAGENT

The reagent is ready to use

MES buffer pH 6.0	50 mmol/l
Calcium acetate	5 mmol/l
Sodium Chloride	51.5 mmol/l
Sodium azide	1.5 mmol/l
Gal-G2-α-CNP substrate	4.55 mmol/l

When stored at 2 to 8°C and protected from light, the reagent are stable until the expiration date stated on the label. Discard cloudy reagent.

The reagent is very sensitive to external contamination (e.g saliva, sweat) handle with gloves and keep the vial tightly sealed after use. Avoid direct exposure to light.

PROCEDURE

Wavelength	405/410 nm
Temperature	37°C
Zero adjustment	Distilled water
Cuvette	1 cm light path
Method	Kinetic - increasing

If the absorbance of the working reagent is higher than 0.5 at 405nm the reagent can not be used.

Sample	20 µl
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

Activity (U/l) = Δ O.D./min X 3590

LINEARITY

Up to 1000 U/l.

QUALITY CONTROL

All control sera with Amylase 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.

SPECIFICATIO

Bilirubine 0.6g/l, lipid 10g/l, glucose 2g/l and ascorbic acid 1g/l don't interfere with the assay up to the given levels.

PRESENTATION

10 X 10 ml Cat No 0401 100 Tests

Bibliography

- Henry, R.J and Chiamori, N., Clin Chem 6:434 (1960)
- David, H., Clin Chem. 28:1485 (1985)
- Young, D.S., Effects of drug on clinical laboratory tests, 3rd Edition AACC Press, 1990

The following symbols are used on labels



For in vitro diagnostic use



Use day (last day of the month)



Temperature limitation



Batch code



Code