CORALYZER
System Pack

α Amylase Kit

(Direct Substrate Method)

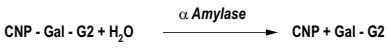
For the determination of α Amylase activity in serum.
(For Invitro Diagnostic Use Only)

Summary

α Amylase is secreted by the pancreas into the duodenum where it aids the catabolism of carbohydrates to simple sugars. Damage to the pancreas or obstruction to the pancreatic duct causes the enzyme to enter the blood stream. Elevated levels are found in acute pancreatitis, perforated / penetrating peptic ulcers, paraotitis (mumps). Patients with chronic pancreatic disorders having pancreatic cell destruction do not have high levels as less amylase is produced by the pancreas.

Principle

α Amylase catalyses the hydrolysis of a 2 - Chloro - 4 nitro phenol salt to Chloronitrophenol (CNP). The rate of hydrolysis is measured as an increase in absorbance due to the formation of Chloronitrophenol which is proportional to the α Amylase activity in the sample.



Normal reference values

Serum : up to 90 U/L at 37°C

It is recommended that each laboratory establish its own normal range representing its patient population.

Contents

Coralyzer 100 System Packs	**40 ml**	**90 ml**
L1 : Amylase Reagent	4 x 10 ml	3 x 30 ml
Coralyzer 100 System Packs	**270 ml**	
L1 : Amylase Reagent	9 x 30 ml	
Coralyzer 200 System Packs	**40 ml**	**120 ml**
L1 : Amylase Reagent	4 x 10 ml	8 x 15 ml

Reagent preparation

Reagents are ready to use. Do not pipette with mouth.

Sample material

Serum, heparinised plasma, urine.
α Amylase is reported to be stable in the sample for 5 days at 2 - 8°C. Separate serum from clot as soon as possible.

Calibration

Calibrator is recommended for calibration of this assay.

Linearity

This procedure is linear upto 1000 U/L at 37°C.

Note

Anticoagulants like oxalate and EDTA bind Calcium which is needed for α Amylase activity and should not be used. Heparin may be used.
Saliva and sweat contain α Amylase. Avoid contamination of reagent and sample during use.
For users to convert the values obtained by this method to the EPS substrate methods, multiply the results obtained by 2.45.

References

IFCC methods for the measurment of catalytic concentrations of enzymes, J. Clin. Chem. Acta. (1999) 281 : 5

Programming on	**CORALYZER 100/200**
Item	AMYLASE
Full Name	AMYLASE
Test Method	Kinetic
Base Information	
Unit	U/L
Filter	405 nm
Sub. Filter	670 nm
Decimal	xxx.x
High pollute	No
Reagent Blank	
Blank Medium	Reagent
Blank Value	0
Blank Low	0
Blank High	1
Sample	
Sample Volume	6
Dilution Times	1
Range Setup	
Reagent	
Rgt. 1 Volume	300
Rgt. 2 Volume	0
Linearity	1000
Read data for check	
Assistant Start	NONE
Assistant End	NONE
Range Low	0
Range High	2
Test Point Start	4
Test Point End	14
Standard	
Number of standard	1
Factor	1
Correct Factor	1
Standard Cup	User Defined
Conc.	See Calibrator

Manufactured by :
Coral Clinical Systems
A Division of Tulip Diagnostics (P) Ltd.
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