CORALYZER
System Pack

Alkaline Phosphatase Kit (DEA)

(pNPP Kinetic Method)

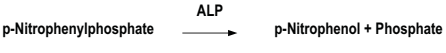
For the determination of Alkaline Phosphatase activity in serum.
(For Invitro Diagnostic Use Only)

Summary

Alkaline Phosphatase (ALP) is an enzyme of the Hydrolase class of enzymes and acts in an alkaline medium.It is found in high concentrations in the liver, biliary tract epithelium and in the bones. Normal levels are age dependent and increase during bone development. Increased levels are associated mainly with liver and bone disease. Moderate increases are seen in Hodgkins disease and congestive heart failure.

Principle

ALP at an alkaline pH hydrolyses p-Nitrophenylphosphate to form p-Nitrophenol and Phosphate. The rate of formation of p-Nitrophenol is measured as an increase in absorbance which is proportional to the ALP activity in the sample.



Normal reference values

Serum	Adults	:	80 - 290 U/L at 37°C
	Children	:	245 - 770 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	**45 ml**	**90 ml**
L1 : Buffer Reagent	3 x 15 ml	3 x 30 ml
T1 : Substrate Tablets	3 Nos. x 15 ml	6 Nos. x 15 ml

Coralyzer 100 System Packs	**270 ml**
L1 : Buffer Reagent	9 x 30 ml
T1 : Substrate Tablets	18 Nos. x 15 ml

Coralyzer 200 System Packs	**45 ml**	**180 ml**
L1 : Buffer Reagent	3 x 15 ml	6 x 30 ml
T1 : Substrate Tablets	3 Nos. x 15 ml	12 Nos. x 15 ml

Storage / stability

Contents are stable at 2 - 8° C till the expiry mentioned on the labels.

Reagent preparation

Dissolve 1 Substrate tablet in 1 bottle (15ml) of Buffer reagent for the 45 ml pack and 2 Substrate Tablets in 1 bottle (30 ml) of Buffer Reagent for the other packs. This working reagent is stable for at least 15 days when stored at 2 - 8°C.

The substrate is light and temperature sensitive. Take adequate care, especially after reconstitution.

Sample material

Serum. Free from hemolysis. ALP is reported to be stable in serum for 3 days at 2 - 8°C.

Calibration

Calibrator is recommended for calibration of this assay.

Linearity

This procedure is linear upto 700 U/L at 37°C.

Note

Samples having a very high activity show a very high initial absorbance. If this is suspected then dilute the sample and repeat the assay.

References

Bowers, G.N., McCommb, R.B., (1972) Clin. Chem. 18 : 97
Recommendations of the German Society for Clinical Chemistry, (1972)
Z. Clin. Chem. Bio. 10 : 182

Programming on	CORALYZER 100/200
Item	ALP
Full Name	ALK. PHOSPHATASE
Test Method	Kinetic
Base Information	
Unit	U/L
Filter	405 nm
Sub. Filter	670 nm
Decimal	xx.xx
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	700
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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