CORALYZER
System Pack

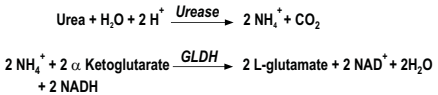
Urea Kit

(GLDH Kinetic Method)

For the determination of Urea in serum or plasma.
(For Invitro Diagnostic Use Only)

Summary
Urea is the end product of protein metabolism. It is synthesized in the liver from the ammonia produced by the catabolism of amino acids. It is transported by the blood to the kidneys from where it is excreted. Increased levels are found in renal diseases, urinary obstructions, shock, congestive heart failure and burns. Decreased levels are found in liver failure and pregnancy.

Principle
Urease hydrolyzes urea to ammonia and CO_2. The ammonia formed further combines with α Ketoglutarate and NADH to form Glutamate and NAD. The rate of oxidation of NADH to NAD is measured as a decrease in absorbance in a fixed time which is proportional to the urea concentration in the sample.



Normal reference values
Serum / Plasma : 14 - 40 mg/dl

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

Contents

Coralyzer 100 System Packs	**80 ml**	**240 ml**
L1 : Enzyme Reagent	2 x 32 ml	6 x 32 ml
L2 : Starter Reagent	16 ml	2 x 24 ml

Coralyzer 200 System Packs	**80 ml**	**300 ml**
L1 : Enzyme Reagent	2 x 32 ml	6 x 40 ml
L2 : Starter Reagent	2 x 8 ml	4 x 15 ml

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

Reagent preparation
Reagents are ready to use.

Sample material
Serum or plasma. Urea is reported to be stable in the serum for 5 days when stored at 2 - 8°C.

Calibration
Calibrator is recommended for calibration of this assay.

Linearity
This procedure is linear up to 250 mg/dl.

Note
Plasma should not be collected with Fluoride or Heparin salts as contamination by ammonia or ammonium salts lead to erroneous results.

References
Fawcett, J.K., Scott, J.E., (1960) J. Chim. Pathol. 13 : 156
Chaey, A. (1962) Clin. Chem. 8 : 130

Programming on	CORALYZER 100/200
Item	UREA
Full Name	UREA
Test Method	Two Point
Base Information	
Unit	mg/dl
Filter	340 nm
Sub. Filter	670 nm
Decimal	xx.xx
High pollute	No
Reagent Blank	
Blank Medium	Reagent
Blank Value	0
Blank Low	0
Blank High	2
Sample	
Sample Volume	3
Dilution Times	1
Range Setup	
Reagent	
Rgt. 1 Volume	240
Rgt. 2 Volume	60
Linearity	250
Read data for check	
Assistant Start	NONE
Assistant End	NONE
Range Low	0
Range High	2
Test Point Start	17
Test Point End	21
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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