# CORALYZER
## System Pack

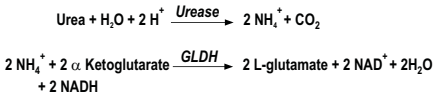
# Urea Kit

(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.
Gitanjali, Dr. Antonio Do Rego Bagh,
Bambolim Complex P.O. GOA - 403 202, INDIA

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