DetectX® Urea Nitrogen (BUN) Colorimetric Detection Kits

VOLUME & NORMALIZATION

KIDNEY INJURY

- Urea is a by-product of protein metabolism by the liver, and is removed from the blood by the kidneys. It filters through the glomerulus, but is reabsorbed by the renal tubules in a flow-dependent fashion.
- The level of circulating urea nitrogen and serum creatinine, serve as a primary measure of kidney function.
- Azotemia, poor kidney function, will cause elevated BUN levels (≥ 50 mg/dL) and is associated with acute kidney failure or injury, severe acute pancreatitis, congestive heart failure or gastrointestinal bleeding.

DetectX® UREA NITROGEN (BUN) DETECTION KITS (K024-H1/H5)

MULTI SPECIES

MOST SENSITIVE

N-CAL™ KIT

Our DetectX® Urea Nitrogen (BUN) Detection Assay Kit does not utilize urease as a method to detect urea. The kit is calibrated to the US National Institute for Standards and Technology (NIST) Standard Reference Material 912a. We have tested ammonia as an interferent in the BUN assay up to almost 82 mM with no change in the measured BUN level.

- **Measure** Urea Nitrogen in 30 minutes
- **N-Cal Kit** calibrated standard
- **Standard Range**: 10-0.156 mg/dL
- **Sample types:** serum, plasma, urine, and tissue cutlure media
- **Measure** up to **88 or 472** samples in duplicate
- **Room temperature** stable reagents
- **Cited** in over **100 publications**

RELATED DetectX® KITS

- Creatinine Urinary Detection Kits **(K002-H1/H5)**
- Creatinine Serum Detection Kits **(KB02-H1/H2)**
- Cystatin C Human ELISA Kit **(K012-H1)**
- Retinol Binding Protein (RBP) Multi-Format ELISA Kits **(K062-H1/H5)**
- Hemoglobin Colorimetric Detection Kit **(K013-H1)**
- Hemoglobin High Sensitivity Detection Kits **(K013-HX1/HX5)**

Intra Assay Precision

Three human samples were further diluted in water and run in replicates of 20 in an assay. The mean and precision of the calculated concentrations were:

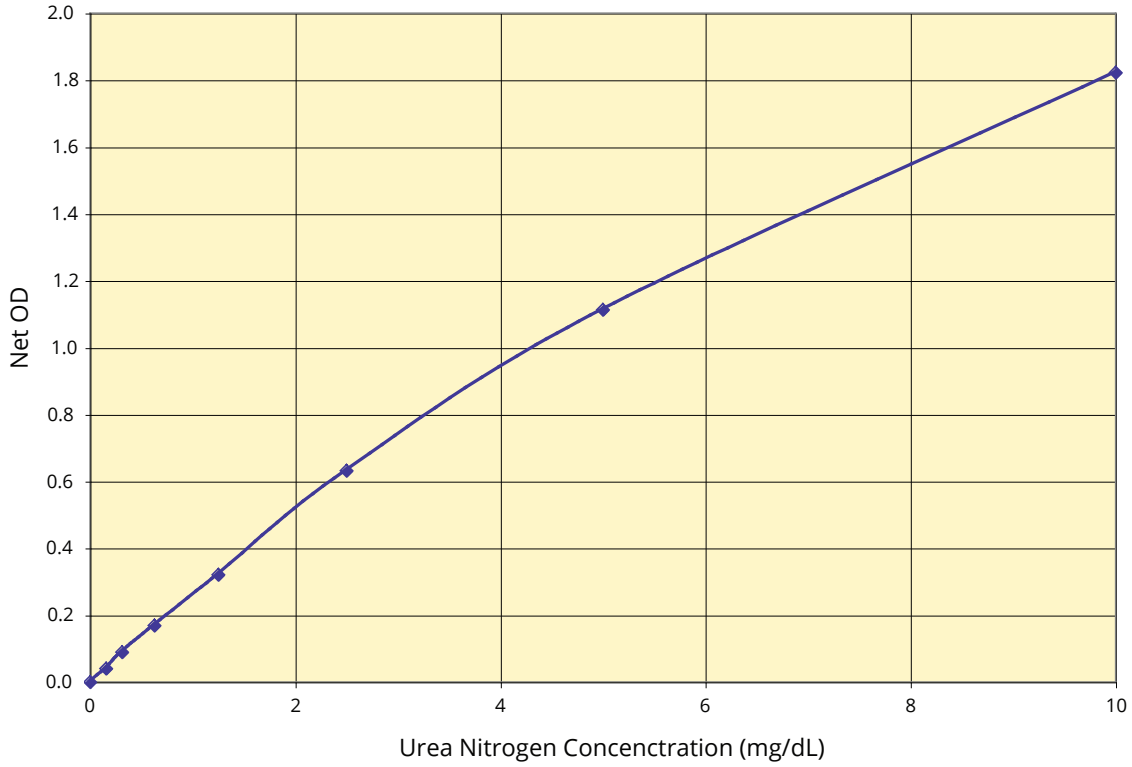
Sample	Urea Nitrogen Conc. (mg/dL)	%CV
1	1.24	2.0
2	2.29	1.9
3	4.86	2.8

Inter Assay Precision

Three human samples were further diluted in water and run in duplicates in twenty-eight assays run over multiple days by five operators. The mean and precision of the calculated concentrations were:

Sample	Urea Nitrogen Conc. (mg/dL)	%CV
1	1.29	3.1
2	2.35	4.3
3	5.18	3.3

Typical Standard Curve



Run your own standard curves for calculation of results. Do not use this data.