Creatinine colorimetric detection kit

Low price, rapid creatinine detection kit for diabetes, cardiovascular and renal research.

The Creatinine colorimetric detection kit utilizes a single-step liquid detection reagent that is safer and less time consuming than other assay methods. This kit is calibrated against the NIST standard and offers reproducible results with less than 6% inter- and intra-assay variation.

Creatinine (2-amino-1-methyl-5H-imadazol-4-one) is a metabolite of phosphocreatine (p-creatine), a molecule used as a store for high-energy phosphate that can be utilized by tissues for the production of ATP. Creatine either comes from the diet or is synthesized from the amino acids arginine, glycine, and methionine. This occurs in the kidneys and liver, although other organ systems may be involved and species-specific differences may exist. Creatine and p-creatine are converted non-enzymatically to the metabolite creatinine, which diffuses into the blood and is excreted by the kidneys. *In vivo*, this conversion appears to be irreversible and *in vitro* it is favored by higher temperatures and lower pH. Creatinine forms spontaneously from p-creatine, and under normal conditions, its formation occurs at a relatively constant rate. Intra-individual variation of creatinine levels is <15% from day to day, making it a useful marker for normalizing levels of other molecules found in urine. Altered creatinine levels may be associated with conditions that result in decreased renal blood flow, such as diabetes and cardiovascular disease.

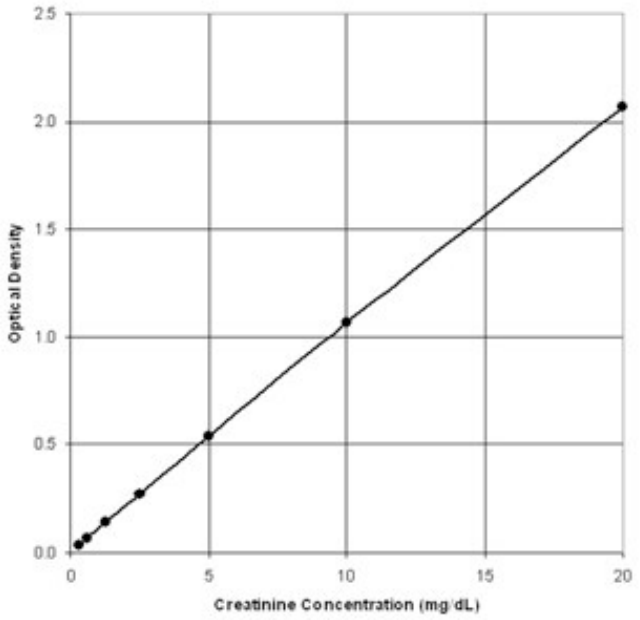
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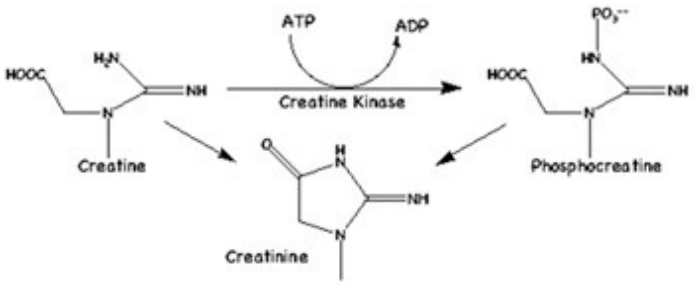
Ordering Information Order Online »

ADI-907-030A	2x96 wells

Manuals, SDS & CofA View Online »

- Easy-to-use one-step creatinine detection
- Fast homogeneous mix-and-ready assay with no wash steps, results in just 30 minutes
- Accurate and calibrated to NIST creatinine standard


Optical Density
2.5
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
Creatinine Concentration (mg/dL)


ATP
ADP
Creatine Kinase
HOOC
NH
Creatine
Phosphocreatine
Creatinine

Handling & Storage

Long Term Storage	+4°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application	Colorimetric detection
Application Notes	For the quantitative determination of urinary creatinine from any species.
Assay Time	30 minutes
Compatibility	This product is compatible with the **Absorbance 96 Plate Reader**.
Contents	Microtiter plate, Standard, Detection Reagent
Sensitivity	0.042 mg/dl (range 0.31 – 20 mg/dl)
Species Reactivity	Species independent

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