

## Product datasheet

# Creatinine Assay Kit ab65340

★★★★★ [2 Abreviews](#) [126 References](#) [6 Images](#)

### Overview

|                         |  |
|-------------------------|--|
| <b>Product name</b>     | Creatinine Assay Kit   |
| <b>Detection method</b> | Colorimetric/Fluorometric  |
| <b>Sample type</b>      | Urine, Serum, Other biological fluids, Cerebral Spinal Fluid   |
| <b>Assay type</b>       | Quantitative   |
| <b>Assay time</b>       | 1h 00m   |
| <b>Product overview</b> | <p>Creatinine Assay Kit ab65340 provides an accurate, convenient measure of creatinine concentration in biological fluids such as serum, urine or CSF.</p> <p>In the creatinine assay protocol, creatinine is converted to creatine by creatininase, creatine is converted to sarcosine, which is specifically oxidized to produce a product which reacts with a probe to generate red color (<math>\lambda_{max} = 570 \text{ nm}</math>) and fluorescence (<math>Ex/Em = 538/587 \text{ nm}</math>).</p> <p>Unlike picric acid assays, this kit is suitable for serum creatinine determinations, as well as for urine and other biological samples.</p> <p>Creatinine assay protocol summary:</p> <ul style="list-style-type: none"> <li>- add samples and standards to wells</li> <li>- add reaction mix and incubate for 60 min at 37°C</li> <li>- analyze with microplate reader</li> </ul> <p>For deproteinization of samples: Better results are typically seen with this assay when using a 10kda filter for sample deproteinization than when using the PCA method.</p> |
| <b>Notes</b>            | <p>This product is manufactured by BioVision, an Abcam company and was previously called K625 Creatinine Colorimetric/Fluorometric Assay Kit. K625-100 is the same size as the 100 test size of ab65340.</p>   |
| <b>Platform</b>         | Microplate reader  |

### Properties

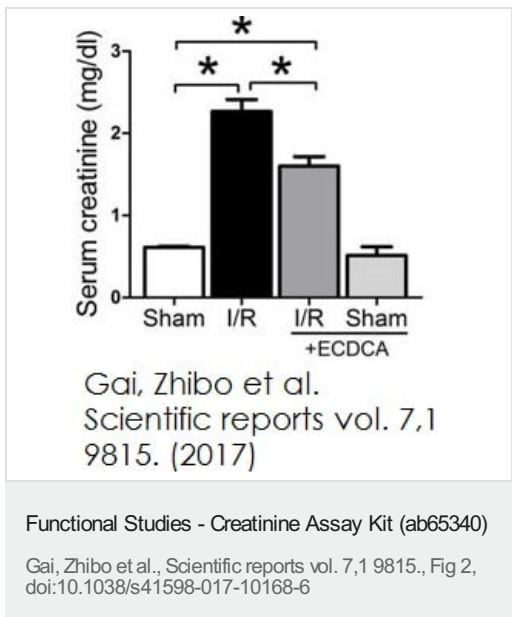
**Storage instructions** Store at -20°C. Please refer to protocols.

| Components           | 100 tests | 2000 tests |
|----------------------|-----------|------------|
| Assay Buffer II      | 1 x 25ml  | 20 x 25ml  |
| Creatinase           | 1 vial    | 20 vials   |
| Creatininase         | 1 vial    | 20 vials   |
| Sarcosine Enzyme Mix | 1 vial    | 20 vials   |
| Creatinine Standard  | 1 vial    | 20 vials   |
| OxiRed Probe         | 1 x 200µl | 20 x 200µl |

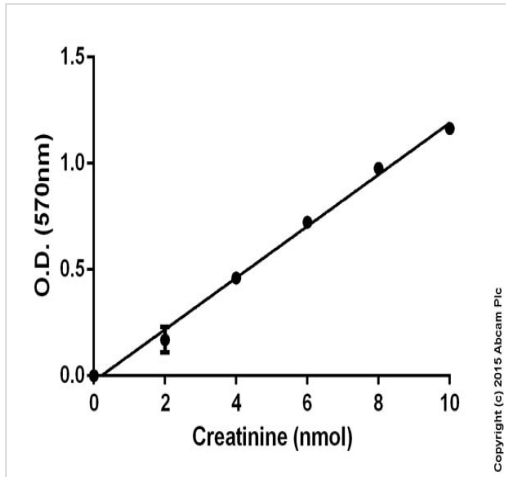
## Relevance

Creatinine, or creatine anhydride, is a breakdown product of creatine phosphate in muscle. The loss of water molecule from creatine results in the formation of creatinine. Creatinine is transferred to the kidneys by blood plasma, whereupon it is eliminated from the body by glomerular filtration and partial tubular excretion. Creatinine is usually produced and excreted at a fairly constant rate, and blood creatinine is used to determine glomerular filtration rate (GFR), a measure of kidney function.

## Images

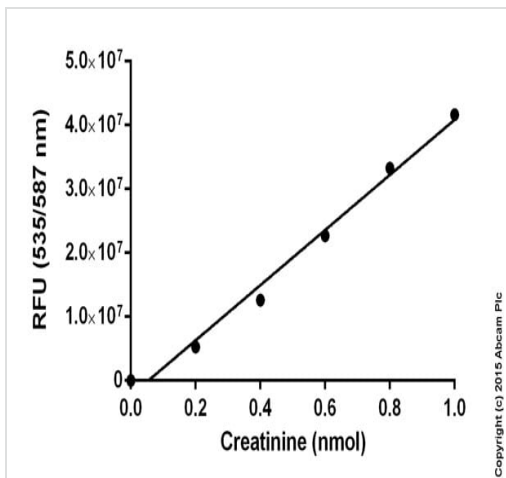


Mice were injected i.p. with 6-ECDCA before I/R injury. At 24 h after I/R, kidney, serum and urine samples were collected for measurements of creatinine in serum with ab65340



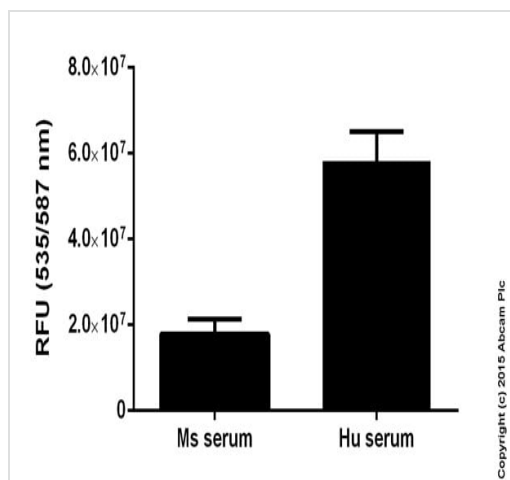
Standard curve: mean of duplicates (+/- SD) with background reads subtracted

Functional Studies - Creatinine Assay Kit (ab65340)



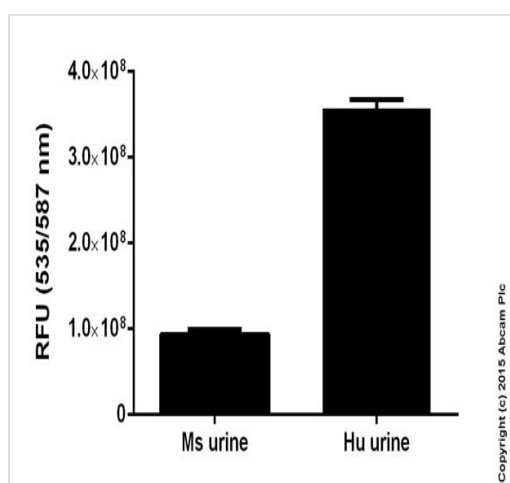
Standard curve: mean of duplicates (+/- SD) with background reads subtracted

Functional Studies - Creatinine Assay Kit (ab65340)



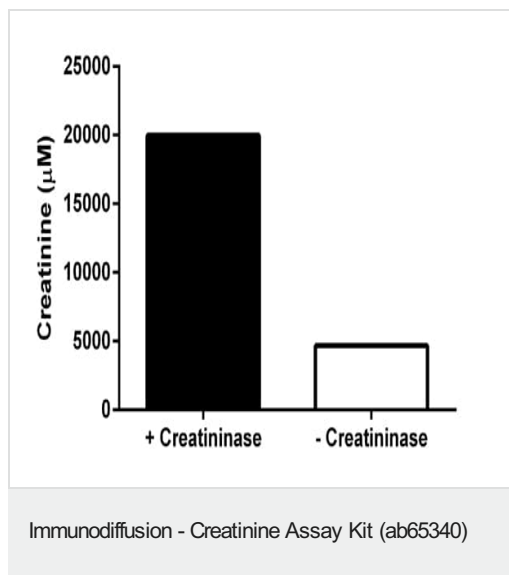
Creatinine measured in mouse and human serum plotted against RFU. Samples were diluted 5-10 fold.

Functional Studies - Creatinine Assay Kit (ab65340)



Creatinine measured in mouse and human urine plotted against RFU. Samples were diluted 400-800 fold.

Functional Studies - Creatinine Assay Kit (ab65340)



Creatinine levels in filtered human urine was measured in the presence or absence of creatininase (background signal subtracted).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors