

## General Citrate Assay Kit

Citrate Microplate Assay Kit

|                               |                              |                                         |
|-------------------------------|------------------------------|-----------------------------------------|
| CATALOG #<br><b>AAA261571</b> | REACTIVITY<br><b>General</b> | APPLICATIONS<br><b>Functional Assay</b> |
|-------------------------------|------------------------------|-----------------------------------------|

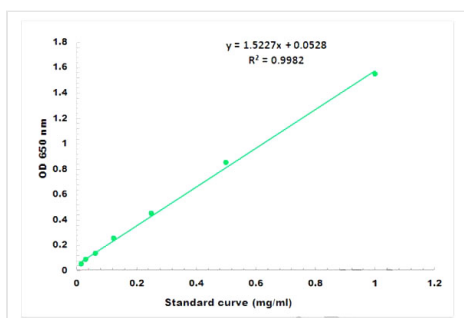
### PRODUCT SYNONYMS

Citrate; Citrate Microplate Assay Kit; citric acid; Citrate assay kit

### PRODUCT SPECIFICATIONS

|                                               |                                                                                                         |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Reactivity                                    | General                                                                                                 |
| Samples                                       | Urine, Serum, Plasma, Other biological fluids, Tissue extracts, Cell lysate, Cell culture media Samples |
| Detection Range                               | 0.05 mmol/L - 5 mmol/L                                                                                  |
| Applicable Applications for Citrate assay kit | FA (Functional Assay)                                                                                   |
| Preparation and Storage                       | Shipped and store at 4 degree C for 6 months.                                                           |

### IMAGES



Standard Curve (Sample)

### ADDITIONAL INFORMATION

#### Related Product Information for Citrate assay kit

Background: Citrate is a key tricarboxylic acid (TCA) cycle intermediate formed by the addition of oxaloacetate to the acetyl group of acetyl-CoA. Citrate is transported out of the mitochondria via the citrate-malate shuttle and converted back to acetyl-CoA for fatty acid synthesis. Citrate is an allosteric modulator of both fatty acid synthesis via its actions on acetyl-CoA carboxylase and of glycolysis via its actions on phosphofructokinase. Citrate metabolism and disposition can vary widely due to sex, age, and a variety of other factors including disease states. Cellular citrate levels are decreased in prostate cancer cells and citrate levels may be a marker of prostate cancer growth rate. Citrate Microplate Assay Kit is a sensitive assay for determining citrate concentration in various samples. Citrate breaks down into keto acid by citrate lyase. The color intensity, measured at 340 nm, is proportionate to the citrate concentration in the sample.

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.