

General Cysteine Assay Kit

Cysteine Microplate Assay Kit

CATALOG # AAA27897	REACTIVITY General	APPLICATIONS Functional Assay
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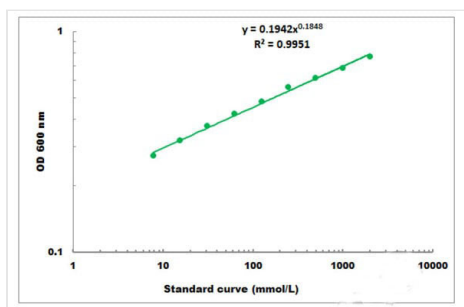
PRODUCT SYNONYMS

Cysteine; Cysteine Microplate Assay Kit; (R)-2-Amino-3-mercaptopropanoic acid; (R)-Cysteine; 2-Amino-3-mercaptopropionic acid; Cystein; Half-cystine; L-(+)-Cysteine; L-Alanine 3-mercapto-; L-cisteina; L-Cys; L-Cystein; L-Cysteine; Thioserine; alpha-Amino-beta-thiolpropionic acid; beta-Mercaptoalanine; Cysteine assay kit

PRODUCT SPECIFICATIONS

Reactivity	General
Samples	Tissue extracts, Cell lysate, Cell culture media and Other biological fluids Samples
Applicable Applications for Cysteine assay kit	FA (Functional Assay)
Preparation and Storage	Store at 4 degree C for 6 months.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for Cysteine assay kit

Background: Cysteine (CYS) is a sulfhydryl-containing amino acid and an important structural and functional part of proteins. In animals, cysteine is synthesized from transsulfuration of homocysteine, which is itself derived from metabolism of the amino acid methionine. Cystathionine beta-synthase catalyzes condensation of homocysteine with serine to form cystathionine, which is deaminated and hydrolyzed by Cystathionine beta-lyase to form cysteine and alpha-ketobutyrate. Because of its nucleophilic nature, the thiol group of cysteine has numerous biological functions. The formation of disulfide linkages between the thiol groups of cysteine residues helps to stabilize the tertiary and quaternary structure of proteins. Cysteine, homocysteine (HCY), and other aminothiols exist in plasma in reduced, oxidized, and protein-bound forms, interacting with each other through redox pathways. Cysteine is the limiting precursor of the major intracellular antioxidant glutathione. The individuals with lower cysteine levels are more prone to damage from reactive oxygen species, which are generally removed either by thiols or by glutathione-linked enzymes. An elevated level of total cysteine also predicts adverse outcomes such as cardiovascular diseases and metabolic syndromes. Cysteine Microplate Assay Kit is a sensitive assay for determining Cysteine in various samples. Cysteine concentration is determined by sodium tungstate dihydrate. The reaction products can be measured at a colorimetric readout at 600 nm.

Principle of the Assay: 20 mmol/L - 2000 mmol/L

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.

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Online datasheet: <https://stage.aaabiotech.com/general-assay-kits/cysteine/27897>