

# Rat Low affinity cationic amino acid transporter 2 (SLC7A2) ELISA Kit

Catalog No: #EK7251

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

Package Size: #EK7251-1 48T #EK7251-2 96T

## Description

Product Name	Rat Low affinity cationic amino acid transporter 2 (SLC7A2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	ATRC2; CAT2; HCAT2; amino acid transporter; cationic 2 cationic amino acid transporter; y+ system low-affinity cationic amino acid transporter-2 solute carrier family 7; member 2
Accession No.	B5D5N9
Uniprot	B5D5N9
GeneID	64554;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.069 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate SLC7A2 in samples. An antibody specific for SLC7A2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC7A2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC7A2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SLC7A2 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**The gene encodes a 658-amino acid polypeptide that is 60% similar to CAT1 (ATRC1). CAT1 and CAT2 are members of the APC family of transporters, the members of which are specific for amino acids, polyamines, and choline. Northern blot analysis revealed that CAT2 is expressed as a 9.0-kb transcript in a variety of tissues.

CAT2A and CAT2B are produced by alternative splicing. The deduced CAT2A and CAT2B proteins contain 657 and 658 amino acids, respectively, and both have 14 transmembrane domains and 2 putative N-glycosylation sites in extracellular loop 3. They differ from one another in 19 residues in the vicinity of transmembrane segments 8 and 9.

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Note: This product is for in vitro research use only