

Anti-SLC7A3 Picoband Antibody

Catalog # ABO13070

Product Information

Application	WB
Primary Accession	Q8WY07
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Cationic amino acid transporter 3(SLC7A3) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	84889
Other Names	Cationic amino acid transporter 3, CAT-3, CAT3, Cationic amino acid transporter y+, Solute carrier family 7 member 3, SLC7A3, ATRC3, CAT3
Calculated MW	67169
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cell membrane; Multi-pass membrane protein.
Tissue Specificity	Highly expressed in thymus, uterus and testis. Detected at lower levels in brain, mammary gland, prostate, salivary gland and fetal spleen. In brain, highest expression in thalamus, hippocampus and amygdala. .
Source	Eukaryota
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human SLC7A3 (1-30aa MPWQAFRRFGQKLVRRTLESGMAETRLAR), different from the related mouse and rat sequences by four amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	SLC7A3 (HGNC:11061)
Synonyms	ATRC3, CAT3
Function	Uniporter that mediates the uptake of cationic L-amino acids such as L-arginine, L-lysine and L-ornithine (PubMed: 11591158). The transport is sodium ions- and pH-independent, moderately trans- stimulated and is mediated by passive diffusion (PubMed: 11591158).
Cellular Location	Cell membrane; Multi-pass membrane protein.
Tissue Location	Highly expressed in thymus, uterus and testis (PubMed:11591158). Detected at lower levels in brain, mammary gland, prostate, salivary gland and fetal spleen (PubMed:11591158). In brain, highest expression in thalamus, hippocampus and amygdala (PubMed:11591158).

Background

Cationic amino acid transporter 3 is a protein that in humans is encoded by the SLC7A3 gene. This gene encodes a member of the solute carrier family 7. The encoded protein is a sodium-independent cationic amino acid transporter. Alternate splicing results in multiple transcripts that encoded the same protein. The International Radiation Hybrid Mapping Consortium mapped the SLC7A3 gene to the X chromosome.

Images

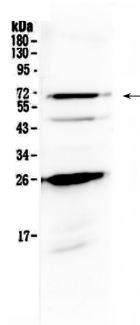


Figure 1. Western blot analysis of SLC7A3 using anti-SLC7A3 antibody (ABO13070). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human A431 whole cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SLC7A3 antigen affinity purified polyclonal antibody (Catalog # ABO13070) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SLC7A3 at approximately 67KD. The expected band size for SLC7A3 is at 67KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.