

Anti-SLC7A7 Antibody Picoband®

Catalog Number: A03602-2

About SLC7A7

Y+L amino acid transporter 1 is a protein that in humans is encoded by the SLC7A7 gene. The protein encoded by this gene is the light subunit of a cationic amino acid transporter. This sodium-independent transporter is formed when the light subunit encoded by this gene dimerizes with the heavy subunit transporter protein SLC3A2. This transporter is found in epithelial cell membranes where it transfers cationic and large neutral amino acids from the cell to the extracellular space. Defects in this gene are a cause of lysinuric protein intolerance (LPI). Alternative splicing results in multiple transcript variants.

Overview

Product Name	Anti-SLC7A7 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SLC7A7 Antibody Picoband® catalog # A03602-2. Tested in WB, IHC, IF, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, IF, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q9UM01

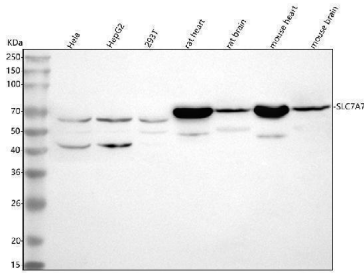
Technical Details

Immunogen	E.coli-derived human SLC7A7 recombinant protein (Position: M1-D498). Human SLC7A7 shares 90.8% and 91.6% amino acid (aa) sequence identity with mouse and rat SLC7A7, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.

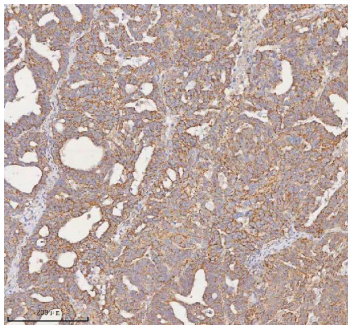
Suggested Dilutions

Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat
Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human
Immunofluorescence, 5 ug/ml, Human
ELISA, 0.1-0.5 ug/ml, -

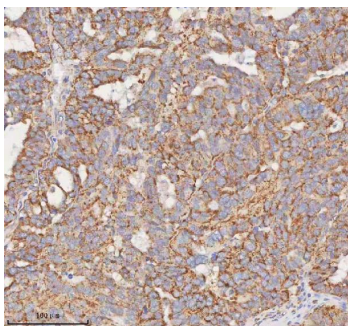
Anti-SLC7A7 Antibody Picoband® (A03602-2) Images



Western blot analysis of SLC7A7 using anti-SLC7A7 antibody (A03602-2). 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 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: human 293T whole cell lysates, Lane 4: rat heart tissue lysates, Lane 5: rat brain tissue lysates, Lane 6: mouse heart tissue lysates, Lane 7: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-SLC7A7 antigen affinity purified polyclonal antibody (Catalog # A03602-2) at 0.5 ug/mL overnight at 4°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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SLC7A7 at approximately 60 kDa. The expected band size for SLC7A7 is at 56 kDa.

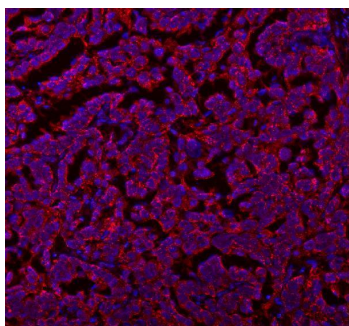


IHC analysis of SLC7A7 using anti-SLC7A7 antibody (A03602-2). SLC7A7 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-SLC7A7 Antibody (A03602-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of SLC7A7 using anti-SLC7A7 antibody (A03602-2). SLC7A7 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-SLC7A7 Antibody (A03602-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IF analysis of SLC7A7 using anti-SLC7A7 antibody (A03602-2). SLC7A7 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated



antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-SLC7A7 Antibody (A03602-2) overnight at 4°C. DyLight@594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-SLC7A7 Antibody

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