

## Anti-SLC5A7 Antibody Picoband®

Catalog Number: A05277-1

### About SLC5A7

The high-affinity choline transporter (ChT) also known as solute carrier family 5 member 7 is a protein in humans that is encoded by the SLC5A7 gene. This gene encodes a sodium ion- and chloride ion-dependent high-affinity transporter that mediates choline uptake for acetylcholine synthesis in cholinergic neurons. The protein transports choline from the extracellular space into presynaptic terminals for synthesis into acetylcholine. Increased choline uptake results from increased density of this protein in synaptosomal plasma membranes in response to depolarization of cholinergic terminals. Dysfunction of cholinergic signaling has been implicated in various disorders including depression, attention-deficit disorder, and schizophrenia. An allelic variant of this gene is associated with autosomal dominant distal hereditary motor neuropathy type VIIA. Alternative splicing results in multiple transcript variants.

### Overview

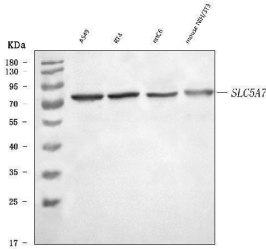
Product Name	Anti-SLC5A7 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SLC5A7 Antibody Picoband® catalog # A05277-1. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
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	Q9GZV3

### Technical Details

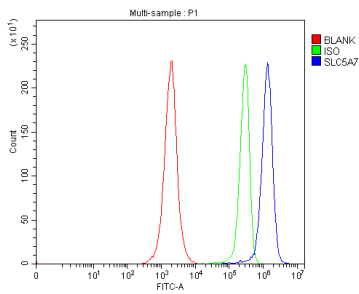
Immunogen	E.coli-derived human SLC5A7 recombinant protein (Position: R446-Q580).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml/ml, Human, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/ml/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 ug/ml/ml, Human

## Anti-SLC5A7 Antibody Picoband® (A05277-1) Images



Western blot analysis of SLC5A7 using anti-SLC5A7 antibody (A05277-1). 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 A549 whole cell lysates, Lane 2: human RT4 whole cell lysates, Lane 3: rat C6 whole cell lysates, Lane 4: mouse NIH/3T3 whole cell 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-SLC5A7 antigen affinity purified polyclonal antibody (Catalog # A05277-1) 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 SLC5A7 at approximately 80 kDa. The expected band size for SLC5A7 is at 63 kDa.



Flow Cytometry analysis of JK cells using anti-SLC5A7 antibody (A05277-1). Overlay histogram showing JK cells stained with A05277-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SLC5A7 Antibody (A05277-1, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

### Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-SLC5A7 Antibody

For Research Use Only. Not for use in diagnostic procedures.