

Anti-PCTP-L/STARD10 Antibody Picoband®

Catalog Number: A10577-1

About STARD10

StAR-related lipid transfer protein 10 (STARD10) or PCTP-like protein is a lipid transfer protein that in humans is encoded by the STARD10 gene. StarD10 is a dual-specificity lipid transfer protein capable of shuttling phosphatidylcholine (PC) and phosphatidylethanolamine (PE) between membranes in vitro; changes in membrane composition of PC and PE occur before the morphological tumorigenic events. Interestingly, STARD10 has been described to be highly expressed in 35-40% of ERBB2-positive breast cancers. StarD10 was initially discovered based on its cross-reactivity with a phosphoserine-specific antibody in mammary tumors from Neu/ErbB2 transgenic mice and subsequently isolated from SKBR3 human breast carcinoma cells using a multistep biochemical purification strategy. StarD10 contains a steroidogenic acute regulatory protein (StAR/StarD1)-related lipid transfer (START) domain that is thought to mediate binding of lipids. STARD10 is highly expressed in the liver and has been shown to transfer phosphatidylcholine.

Overview

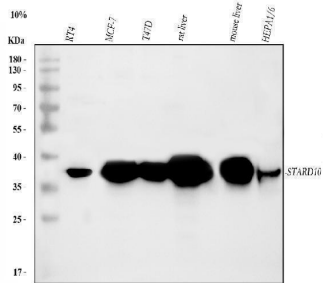
Product Name	Anti-PCTP-L/STARD10 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PCTP-L/STARD10 Antibody Picoband® catalog # A10577-1. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates 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, IF, IHC, ICC, 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	Q9Y365

Technical Details

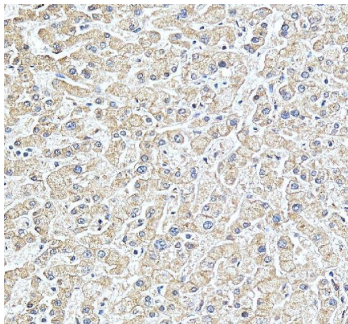
Immunogen	E.coli-derived human PCTP-L/STARD10 recombinant protein (Position: M1-E273).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	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 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 Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry(Fixed), 1-3 ug/1x10 ⁶ cells, Human ELISA, 0.1-0.5 ug/ml, -

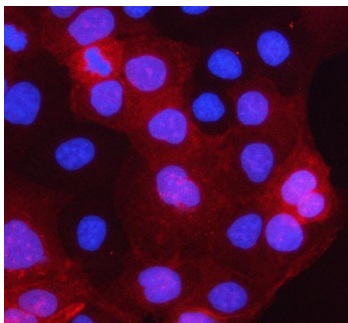
Anti-PCTP-L/STARD10 Antibody Picoband® (A10577-1) Images



Western blot analysis of PCTP-L/STARD10 using anti-PCTP-L/STARD10 antibody (A10577-1). 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 RT4 whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human T47D whole cell lysates, Lane 4: rat liver tissue lysates, Lane 5: mouse liver tissue lysates, Lane 6: mouse HEPA1-6 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-PCTP-L/STARD10 antigen affinity purified polyclonal antibody (Catalog # A10577-1) 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 PCTP-L/STARD10 at approximately 37 kDa. The expected band size for PCTP-L/STARD10 is at 33 kDa.

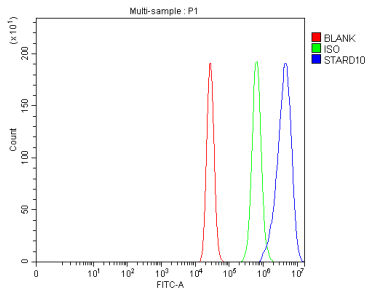


IHC analysis of STARD10 using anti-STARD10 antibody (A10577-1). STARD10 was detected in a paraffin-embedded section of human liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-STARD10 Antibody (A10577-1) 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 PCTP-L/STARD10 using anti-PCTP-L/STARD10 antibody (A10577-1). PCTP-L/STARD10 was detected in an immunocytochemical section of CACO-2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PCTP-L/STARD10 Antibody (A10577-1) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) 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.

Flow Cytometry analysis of MCF-7 cells using anti-PCTP-L/STARD10 antibody (A10577-1). Overlay histogram showing



MCF-7 cells stained with A10577-1 (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-PCTP-L/STARD10 Antibody (A10577-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a 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-PCTP-L/STARD10 Antibody

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