

Anti-LCTL Antibody Picoband®

Catalog Number: A14882-2

About LCTL

Lactase-like is a protein that in humans is encoded by the LCTL gene. This gene encodes a member of family 1 glycosidases. Glycosidases are enzymes that hydrolyze glycosidic bonds and are classified into families based on primary amino acid sequence. Most members of family 1 have two conserved glutamic acid residues, which are required for enzymatic activity. The mouse ortholog of this protein has been characterized and has a domain structure of an N-terminal signal peptide, glycosidase domain, transmembrane domain, and a short cytoplasmic tail. It lacks one of the conserved glutamic acid residues important for catalysis, and its function remains to be determined (PMID: 12084582). Alternative splicing results in multiple transcript variants.

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Overview

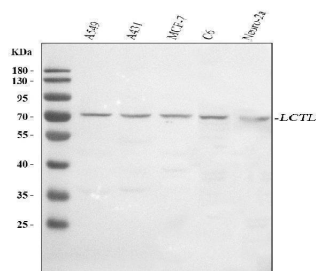
Product Name	Anti-LCTL Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-LCTL Antibody Picoband® catalog # A14882-2. Tested in ELISA, WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that 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 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	Q6UWM7

Technical Details

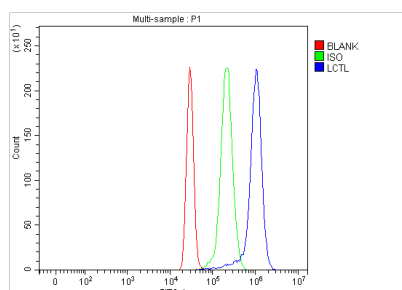
Immunogen	E.coli-derived human LCTL recombinant protein (Position: D67-Q537).
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Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross reactivity with other proteins.
Isotype	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 Flow Cytometry (Fixed), 1-3 ug/1x10⁶ cells, Human ELISA, 0.1-0.5 ug/ml, - Note: For flow cytometry (FCM), validated for fixed cells only. Not validated for FACS or surface flow cytometry using live cells.

Anti-LCTL Antibody Picoband® (A14882-2) Images



Western blot analysis of LCTL using anti-LCTL antibody (A14882-2). 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 A549 whole cell lysates, Lane 2: human A431 whole cell lysates, Lane 3: human MCF-7 whole cell lysates, Lane 4: rat C6 whole cell lysates, Lane 5: mouse Neuro-2a 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-LCTL antigen affinity purified polyclonal antibody (Catalog # A14882-2) 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 LCTL at approximately 70 kDa. The expected band size for LCTL is at 65 kDa.



Flow Cytometry analysis of HepG2 cells using anti-LCTL antibody (A14882-2). Overlay histogram showing HepG2 cells stained with A14882-2 (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-LCTL Antibody (A14882-2, 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.

Anti-LCTL Antibody

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