BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-LRTOMT Antibody Picoband®

Catalog Number: A13092-1

About LRTOMT

Leucine rich transmembrane and O-methyltransferase domain containing is a protein that in humans is encoded by the LRTOMT gene. It is mapped to 11q13.4. This gene has evolved in primates as a fusion of two ancestral neighboring genes, Lrrc51 and Tomt, which exist as two independent genes in rodents. The fusion gene contains some shared exons, but encodes structurally unrelated proteins, LRTOMT1 and LRTOMT2. Those variants that utilize the more centromere-proximal 3' terminal exon (short transcript form) encode LRTOMT1, while those variants that use a more centromere-distal 3' terminal exon (long transcript form) encode the LRTOMT2 protein. There is a small region within one of the exons of this gene that contains overlapping alternate reading frames for both LRTOMT1 and LRTOMT2. LRTOMT1 shares similarity with the protein encoded by mouse Lrrc51, while LRTOMT2 shares similarity with the protein encoded by mouse Tomt. Alternative splicing results in multiple transcript variants, encoding different isoforms of both LRTOMT1 and LRTOMT2. The LRTOMT1 protein is a leucine-rich repeat-containing protein, while the LRTOMT2 protein is a catechol-O-methyltransferase that catalyzes the transfer of a methyl group from S-adenosyl-L-methionine to a hydroxyl group of catechols and is essential for auditory and vestibular function. Mutations in this gene have been associated with nonsyndromic deafness.

Overview

Product Name	Anti-LRTOMT Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-LRTOMT Antibody catalog # A13092-1. Tested in IHC, 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q8WZ04

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human LRTOMT.
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).

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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, 0.5-1ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 1-2ug/ml, Human, Mouse, Rat

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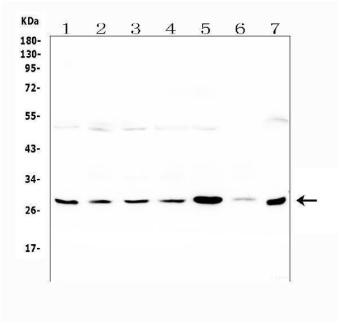
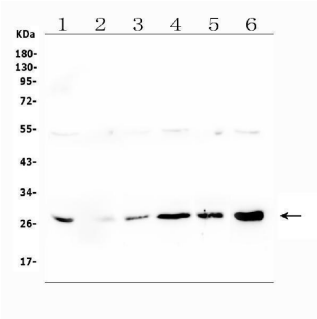
Anti-LRTOMT Antibody Picoband® (A13092-1) Images



Western blot analysis of LRTOMT using anti-LRTOMT antibody (A13092-1). 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 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human Caco-2 whole cell lysates, Lane 5: human K562 whole cell lysates, Lane 6: human U20S whole cell lysates, Lane 7: human THP-1 whole cell lysates. 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-LRTOMT antigen affinity purified polyclonal antibody (Catalog # A13092-1) 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 1:10000 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 LRTOMT at approximately 28KD. The expected band size for LRTOMT is at 28KD.



Western blot analysis of LRTOMT using anti-LRTOMT antibody (A13092-1). 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 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat ovarian tissue lysates, Lane 3: rat heart tissue lysates, Lane 4: rat lung tissue lysates, Lane 5: mouse brain tissue lysates, Lane 6: mouse lung tissue lysates. 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-LRTOMT antigen affinity purified polyclonal antibody (Catalog # A13092-1) 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 1:10000 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 LRTOMT at approximately 28KD. The expected band size for LRTOMT is at 28KD.

IHC analysis of LRTOMT using anti-LRTOMT antibody (A13092-1). LRTOMT was detected in paraffin-embedded section of human placenta tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then

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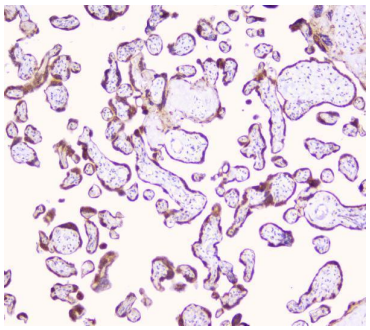
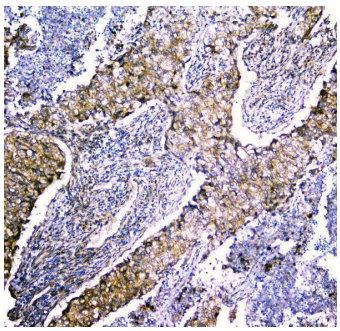
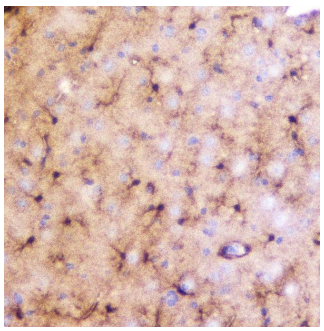


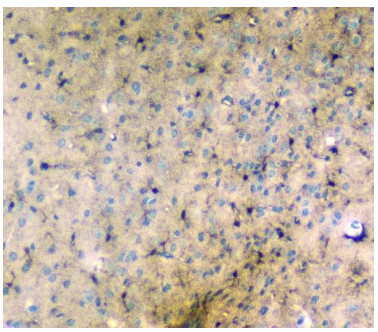
incubated with 1ug/ml rabbit anti-LRTOMT Antibody (A13092-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of LRTOMT using anti-LRTOMT antibody (A13092-1). LRTOMT was detected in paraffin-embedded section of human Lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-LRTOMT Antibody (A13092-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of LRTOMT using anti-LRTOMT antibody (A13092-1). LRTOMT was detected in paraffin-embedded section of mouse brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-LRTOMT Antibody (A13092-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of LRTOMT using anti-LRTOMT antibody (A13092-1). LRTOMT was detected in paraffin-embedded section of mouse brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-LRTOMT Antibody (A13092-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

IHC analysis of LRTOMT using anti-LRTOMT antibody (A13092-1). LRTOMT was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with

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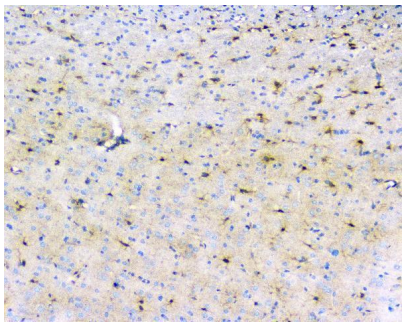

10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-LRTOMT Antibody (A13092-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Anti-LRTOMT Antibody

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