10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Otoferlin Picoband Antibody

Catalog # ABO12302

Specification

Anti-Otoferlin Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q9HC10
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Otoferlin(OTOF) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Otoferlin Picoband Antibody - Additional Information

Gene ID 9381

Other Names
Otoferlin, Fer-1-like protein 2, OTOF, FER1L2

Calculated MW
226753 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization
Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass type II membrane protein . Basolateral cell membrane ; Single-pass type II membrane protein . Endoplasmic reticulum membrane ; Single-pass type II membrane protein . Cell membrane ; Single-pass type II membrane protein . Detected at basolateral cell membrane with synaptic vesicles surrounding the ribbon and at the presynaptic plasma membrane in the inner hair cells (IHCs). Colocalizes with GPR25 and RAB8B in inner hair cells (By similarity). .

Tissue Specificity
Isoform 1 and isoform 3 are found in adult brain. Isoform 2 is expressed in the fetus and in adult brain, heart, placenta, skeletal muscle and kidney.

Protein Name
Otoferlin

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Otoferlin (1831-1863aa QIWDADHFSADDFLGAIELDLNRFPRGAKTAKQ), identical to the related mouse and rat sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the ferlin family.

Anti-Otoferlin Picoband Antibody - Protein Information

Name OTOF

Synonyms FER1L2

Function
Key calcium ion sensor involved in the Ca(2+)-triggered synaptic vesicle-plasma membrane fusion and in the control of neurotransmitter release at these output synapses. Interacts in a calcium-dependent manner to the presynaptic SNARE proteins at ribbon synapses of cochlear inner hair cells (IHCs) to trigger exocytosis of neurotransmitter. Also essential to synaptic exocytosis in immature outer hair cells (OHCs). May also play a role within the recycling of endosomes (By similarity).

Cellular Location
Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q9ESF1}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q9ESF1}. Basolateral cell membrane {ECO:0000250|UniProtKB:Q9ESF1}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q9ESF1}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9ESF1}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q9ESF1}. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9ESF1}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q9ESF1}. Presynaptic cell membrane {ECO:0000250|UniProtKB:Q9ESF1}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q9ESF1}. Cell membrane {ECO:0000250|UniProtKB:Q9ESF1}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q9ESF1}. Note=Detected at basolateral cell membrane with synaptic vesicles surrounding the ribbon and at the presynaptic plasma membrane in the inner hair cells (IHCs) at postnatal day 30 (P30). Colocalizes with GPR25 and RAB8B in inner hair cells {ECO:0000250|UniProtKB:Q9ESF1}

Tissue Location
Isoform 1 and isoform 3 are found in adult brain. Isoform 2 is expressed in the fetus and in adult brain, heart, placenta, skeletal muscle and kidney

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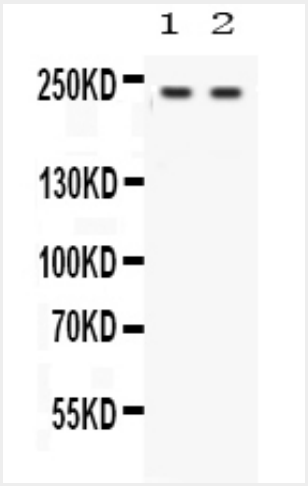
Anti-Otoferlin Picoband Antibody - Protocols

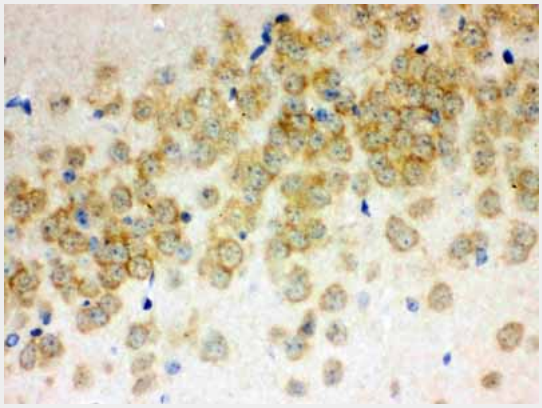
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Otoferlin Picoband Antibody - Images



Anti- Otoferlin Picoband antibody, ABO12302, Western blottingAll lanes: Anti Otoferlin (ABO12302) at 0.5ug/mlLane 1: Rat Cardiac Muscle Tissue Lysate at 50ugLane 2: 293T Whole Cell Lysate at 40ugPredicted bind size: 227KDObserved bind size: 227KD



Anti- Otoferlin Picoband antibody, ABO12302,IHC(P)IHC(P): Mouse Brain Tissue

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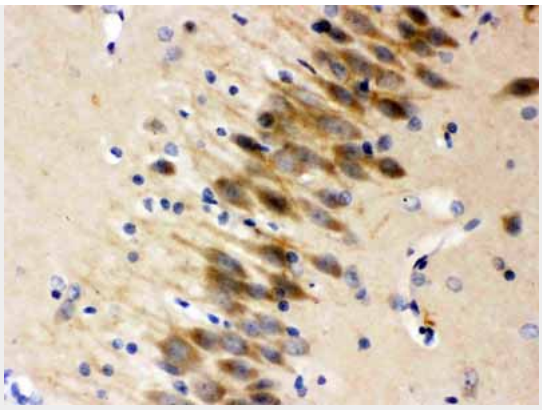
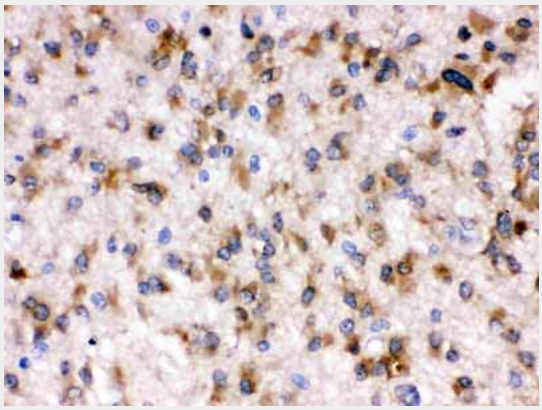


Anti- Otoferlin Picoband antibody, ABO12302,IHC(P)IHC(P): Rat Brain Tissue



Anti- Otoferlin Picoband antibody, ABO12302,IHC(P)IHC(P): Human Glioma Tissue

Anti-Otoferlin Picoband Antibody - Background

Otoferlin is a protein that in humans is encoded by the OTOF gene. Mutations in this gene are a cause of neurosensory nonsyndromic recessive deafness, DFNB9. The short form of the encoded protein has three C2 domains, a single carboxy-terminal transmembrane domain found also in the C. elegans spermatogenesis factor FER-1 and human dysferlin, while the long form has six C2 domains. The homology suggests that this protein may be involved in vesicle membrane fusion. Several transcript variants encoding multipleisoforms have been found for this gene.

Anti-Otoferlin Picoband Antibody - Citations

- Apoptosis of type I spiral ganglion neuron cells in Otof-mutant mice