

Anti-Otoferlin Picoband Antibody

Catalog # ABO12302

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.

Additional Information

Gene ID	9381
Other Names	Otoferlin, Fer-1-like protein 2, OTOF, FER1L2
Calculated MW	226753
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/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.
Source	Eukaryota
Protein Name	Otoferlin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

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.

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 IV membrane protein. Basolateral cell membrane {ECO:0000250 UniProtKB:Q9ESF1}; Single-pass type IV membrane protein. Endoplasmic reticulum membrane {ECO:0000250 UniProtKB:Q9ESF1}; Single-pass type IV membrane protein. Golgi apparatus membrane {ECO:0000250 UniProtKB:Q9ESF1}; Single-pass type IV membrane protein. Presynaptic cell membrane {ECO:0000250 UniProtKB:Q9ESF1}; Single-pass type IV membrane protein. Cell membrane {ECO:0000250 UniProtKB:Q9ESF1}; Single-pass type IV membrane protein. Golgi apparatus, trans-Golgi network. 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

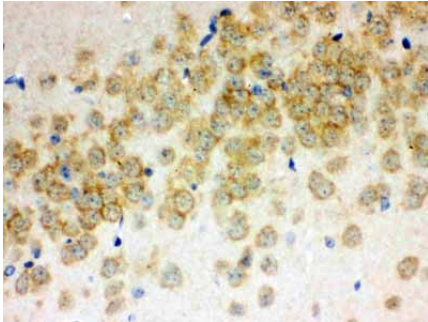
Background

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 multiple isoforms have been found for this gene.

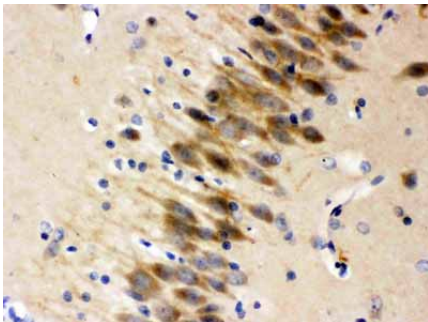
Images



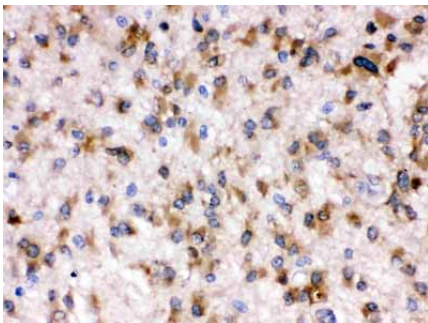
Anti- Otoferlin Picoband antibody, ABO12302, Western blotting
 All lanes: Anti Otoferlin (ABO12302) at 0.5ug/ml
 Lane 1: Rat Cardiac Muscle Tissue Lysate at 50ug
 Lane 2: 293T Whole Cell Lysate at 40ug
 Predicted bind size: 227KD
 Observed bind size: 227KD



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



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.