

## Product datasheet

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# ARG59222 anti-Otoferlin antibody

Package: 50 μg Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Otoferlin

Tested Reactivity Hu, Ms, Rat

Predict Reactivity Hm

Tested Application IHC-P, WB
Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Otoferlin
Species Human

Immunogen Synthetic peptide corresponding to aa. 1831-1863 of Human Otoferlin.

(QIWDADHFSADDFLGAIELDLNRFPRGAKTAKQ)

Conjugation Un-conjugated

Alternate Names FER1L2; DFNB6; AUNB1; DFNB9; Fer-1-like protein 2; NSRD9; Otoferlin

### **Application Instructions**

Application table	Application	Dilution
	IHC-P	0.5 - 1 μg/ml
	WB	0.1 - 0.5 μg/ml
• • • • • • • • • • • • • • • • • • • •	IHC-P: Antigen Retrieval: By heat mediation.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol OTOF

Gene Full Name otoferlin

Background Mutations in this gene are a cause of neurosensory nonsyndromic recessive deafness, DFNB9. The short

form of the encoded protein has 3 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 6 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. [provided by

RefSeq, Jul 2008]

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). [UniProt]

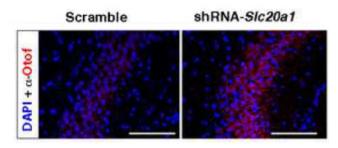
Calculated Mw 227 kDa

Cellular 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. [UniProt]

#### **Images**



#### ARG59222 anti-Otoferlin antibody IHC-P image

Immunohistochemistry: Mouse hippocampal neurons stained with ARG59222 anti-Otoferlin antibody.

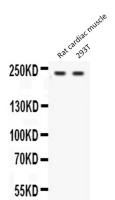
From Ramos-Brossier M et al. Research Square (2024), <u>doi:</u> <u>10.1038/s41419-023-06292-z</u>, Fig. 5C.



#### ARG59222 anti-Otoferlin antibody WB image

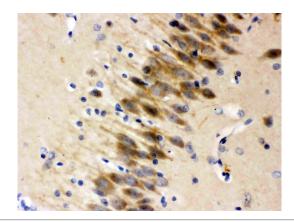
Western blot: Mouse hippocampal neurons stained with ARG59222 anti-Otoferlin antibody.

From Ramos-Brossier M et al. Research Square (2024), <u>doi:</u> 10.1038/s41419-023-06292-z, Fig. 5B.



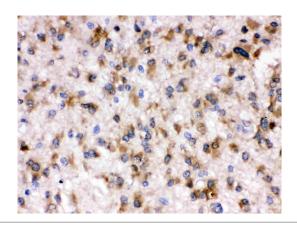
#### ARG59222 anti-Otoferlin antibody WB image

Western blot: 50  $\mu g$  of Rat cardiac muscle and 40  $\mu g$  of 293T whole cell lysate stained with ARG59222 anti-Otoferlin antibody at 0.5  $\mu g/ml$  dilution.



#### ARG59222 anti-Otoferlin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain stained with ARG59222 anti-Otoferlin antibody.



#### ARG59222 anti-Otoferlin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human glioma stained with ARG59222 anti-Otoferlin antibody.