

DFNB31 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11113c**Specification**

DFNB31 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	O9P202
Other Accession	NP_056219.3 , NP_001077354.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	96558
Antigen Region	378-406

DFNB31 Antibody (Center) - Additional Information**Gene ID** 25861**Other Names**

Whirlin, Autosomal recessive deafness type 31 protein, DFNB31, KIAA1526, WHRN

Target/Specificity

This DFNB31 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 378-406 amino acids from the Central region of human DFNB31.

Dilution

WB~~1:1000

IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DFNB31 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DFNB31 Antibody (Center) - Protein Information**Name** WHRN ([HGNC:16361](#))**Function** Involved in hearing and vision as member of the USH2 complex. Necessary for

elongation and maintenance of inner and outer hair cell stereocilia in the organ of Corti in the inner ear. Involved in the maintenance of the hair bundle ankle region, which connects stereocilia in cochlear hair cells of the inner ear. In retina photoreceptors, required for the maintenance of periciliary membrane complex that seems to play a role in regulating intracellular protein transport.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q80VW5}. Cell projection, stereocilium

{ECO:0000250|UniProtKB:Q80VW5}. Cell projection, growth cone

{ECO:0000250|UniProtKB:Q80VW5}. Photoreceptor inner segment

{ECO:0000250|UniProtKB:Q80VW5}. Synapse {ECO:0000250|UniProtKB:Q810W9}.

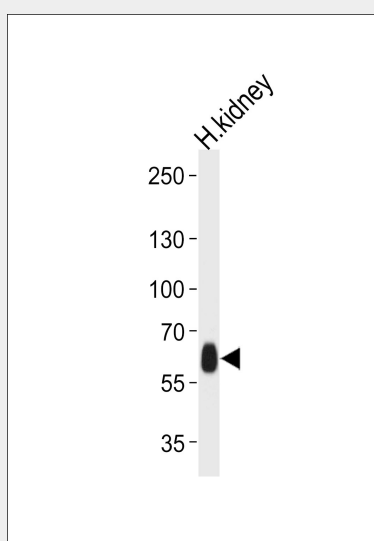
Note=Detected at the level of stereocilia in inner and outer hair cells of the cochlea and vestibule
Localizes to both tip and ankle-link stereocilia regions. Colocalizes with the growing ends of actin filaments. Colocalizes with MPP1 in the retina, at the outer limiting membrane (OLM), outer plexiform layer (OPL), basal bodies and at the connecting cilium (CC). In photoreceptors, localizes at a plasma membrane microdomain in the apical inner segment that surrounds the connecting cilia called periciliary membrane complex. {ECO:0000250|UniProtKB:Q80VW5, ECO:0000250|UniProtKB:Q810W9, ECO:0000269|PubMed:17584769}

DFNB31 Antibody (Center) - Protocols

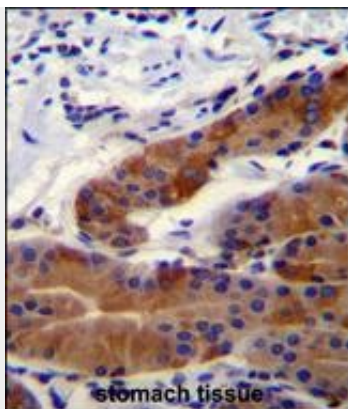
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DFNB31 Antibody (Center) - Images



Western blot analysis of lysate from human kidney tissue lysate, using DFNB31 Antibody (Center)(Cat. #AP11113c). AP11113c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



DFNB31 Antibody (Center) (Cat. #AP11113c) immunohistochemistry analysis in formalin fixed and paraffin embedded stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of DFNB31 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

DFNB31 Antibody (Center) - Background

This gene is thought to function in the organization and stabilization of stereocilia elongation and actin cytoskeletal assembly, based on studies of the related mouse gene. Mutations in this gene have been associated with autosomal recessive non-syndromic deafness and Usher Syndrome. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms.

DFNB31 Antibody (Center) - References

Letra, A., et al. Am. J. Med. Genet. A 152A (7), 1701-1710 (2010) :
Secolin, R., et al. Psychiatr. Genet. 20(3):126-129(2010)
Aller, E., et al. Mol. Vis. 16, 495-500 (2010) :
Toiyama, Y., et al. Int. J. Oncol. 35(4):709-715(2009)
Gosens, I., et al. Hum. Mol. Genet. 16(16):1993-2003(2007)