

**DFNB31 Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP11113c****Specification**

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**DFNB31 Antibody (Center) Blocking peptide - Product Information**Primary Accession [Q9P202](#)**DFNB31 Antibody (Center) Blocking peptide - Additional Information**

Gene ID 25861

**Other Names**

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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**DFNB31 Antibody (Center) Blocking peptide - 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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**DFNB31 Antibody (Center) Blocking peptide - Images****DFNB31 Antibody (Center) Blocking peptide - 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) Blocking peptide - 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)