

**Goat Anti-CDH23 / USH1D Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1220a**

**Specification**

**Goat Anti-CDH23 / USH1D Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9H251</a>
Other Accession	<a href="#">NP_443068</a> , <a href="#">64072</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	369494

**Goat Anti-CDH23 / USH1D Antibody - Additional Information**

**Gene ID** 64072

**Other Names**

Cadherin-23, Otocadherin, CDH23, KIAA1774, KIAA1812

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-CDH23 / USH1D Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-CDH23 / USH1D Antibody - Protein Information**

**Name** CDH23

{ECO:0000303|PubMed:11138009, ECO:0000312|HGNC:HGNC:13733}



AF1220a (1 µg/ml) staining of Human Amygdala lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**Goat Anti-CDH23 / USH1D Antibody - Background**

This gene is a member of the cadherin superfamily, whose genes encode calcium dependent cell-cell adhesion glycoproteins. The encoded protein is thought to be involved in stereocilia organization and hair bundle formation. The gene is located in a region containing the human deafness loci DFNB12 and USH1D. Usher syndrome 1D and nonsyndromic autosomal recessive deafness DFNB12 are caused by allelic mutations of this cadherin-like gene. Alternative splice variants encoding different isoforms have been described.

**Goat Anti-CDH23 / USH1D Antibody - References**

Structure of the N terminus of cadherin 23 reveals a new adhesion mechanism for a subset of cadherin superfamily members. Elledge HM, et al. Proc Natl Acad Sci U S A, 2010 Jun 8. PMID 20498078.  
Personalized smoking cessation: interactions between nicotine dose, dependence and

**Function**

Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells. CDH23 is required for establishing and/or maintaining the proper organization of the stereocilia bundle of hair cells in the cochlea and the vestibule during late embryonic/early postnatal development. It is part of the functional network formed by USH1C, USH1G, CDH23 and MYO7A that mediates mechanotransduction in cochlear hair cells. Required for normal hearing.

**Cellular Location**

Cell membrane; Single-pass type I membrane protein

**Tissue Location**

Particularly strong expression in the retina (PubMed:11138009). Found also in the cochlea

quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Microarray-based mutation analysis of 183 Spanish families with Usher syndrome. Jaijo T, et al. Invest Ophthalmol Vis Sci, 2010 Mar. PMID 19683999.

Assembling stable hair cell tip link complex via multidentate interactions between harmonin and cadherin 23. Pan L, et al. Proc Natl Acad Sci U S A, 2009 Apr 7. PMID 19297620.

Genome-wide association study of smoking initiation and current smoking. Vink JM, et al. Am J Hum Genet, 2009 Mar. PMID 19268276.

**Goat Anti-CDH23 / USH1D 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 Cytometry](#)
- [Cell Culture](#)