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CDH23 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56023

Specification

CDH23 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q9H251
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**367 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human CDH23**
Epitope Specificity	**51-150/3354**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cell membrane; Single-pass type I membrane protein.**
SIMILARITY	**Contains 27 cadherin domains.**
SUBUNIT	**Interacts with PCDH15. Interacts with USH1C and USH1G.**
DISEASE	**Usher syndrome 1D (USH1D) [MIM:601067]: USH is a genetically heterogeneous condition characterized by the association of retinitis pigmentosa with sensorineural deafness. Age at onset and differences in auditory and vestibular function distinguish Usher syndrome type 1 (USH1), Usher syndrome type 2 (USH2) and Usher syndrome type 3 (USH3). USH1 is characterized by profound congenital sensorineural deafness, absent vestibular function and prepubertal onset of progressive retinitis pigmentosa leading to blindness. Note=The disease is caused by mutations affecting the gene represented in this entry.Usher syndrome 1D/F (USH1DF) [MIM:601067]: USH1DF patients are heterozygous for mutations in CDH23 and PCDH15, indicating a digenic inheritance pattern. Note=The disease is caused by mutations affecting distinct genetic loci, including the gene represented in this entry.Deafness, autosomal recessive, 12 (DFNB12)**

[MIM:601386]: A form of non-syndromic sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information. Note=The disease is caused by mutations affecting the gene represented in this entry.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions
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. Upregulation of this gene may also be associated with breast cancer. Alternative splice variants encoding different isoforms have been described. [provided by RefSeq, May 2013].

CDH23 Polyclonal Antibody - Additional Information

Gene ID 64072

Other Names
Cadherin-23, Otocadherin, CDH23 {ECO:0000303|PubMed:11138009, ECO:0000312|HGNC:HGNC:13733}

Target/Specificity
Particularly strong expression in the retina. Found also in the cochlea.

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

CDH23 Polyclonal Antibody - Protein Information

Name CDH23 {ECO:0000303|PubMed:11138009, ECO:0000312|HGNC:HGNC:13733}

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

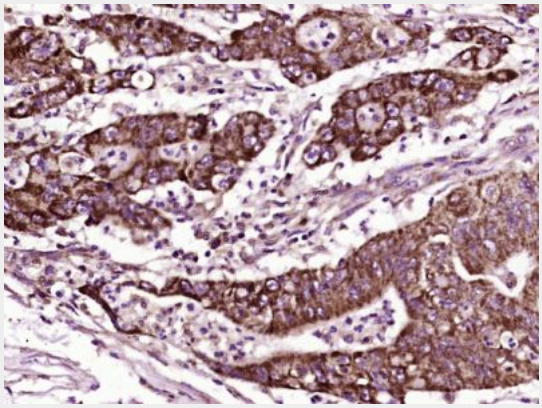
Tissue Location
Particularly strong expression in the retina (PubMed:11138009). Found also in the cochlea

CDH23 Polyclonal 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 Cytomety
- Cell Culture

CDH23 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CDH23) Polyclonal Antibody, Unconjugated (bs-15498R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.