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CDH23 Rabbit pAb

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Catalog # AP56023

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9H251
Reactivity	Human
Predicted	Rat, Dog, Mouse, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	369494
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.
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].

Additional Information

Gene ID	64072
Other Names	Cadherin-23, Otocadherin, CDH23 {ECO:0000303|PubMed:11138009, ECO:0000312|HGNC:HGNC:13733}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C 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 °C.

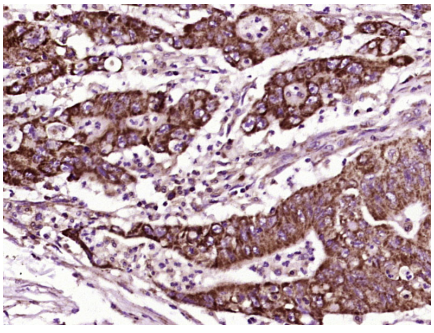
Protein Information

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

Background

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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 (AP56023) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.