

Rabbit Anti-CDH23 /Cy5 Conjugated antibody

SL15498R-Cy5

Product Name	Anti-CDH23 /Cy5
Chinese Name	Cy5 标记的钙粘蛋白 23 抗体
Alias	Cadherin like 23; Age related hearing loss 1; Ahl 1; Ahl; Ahl1; Bob; Bobby; Bus; Bustling; Cadherin 23; Cadherin23; Cadherin-23; CDH 23; Mdfw; Modifier of deaf waddler; nmf112; nmf181; nmf252; Otocadherin; USH 1D; USH1 D; USH1D; Waltzer; CAD23_HUMAN.
Research Area	Neurobiology Signal transduction
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Dog,Cow,Horse,Sheep) IF=1:100-500
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	367kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CDH23
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	
Product Detail	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. 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].

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.

Subunit:

Interacts with PCDH15. Interacts with USH1C and USH1G.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein.

Tissue Specificity:

Particularly strong expression in the retina. Found also in the cochlea.

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.

Similarity:

Contains 27 cadherin domains.

Database links:

[Entrez Gene: 64072](#) Human

[Entrez Gene: 22295](#) Mouse

[Entrez Gene: 114102](#) Rat

[Omim: 605516](#) Human

[SwissProt: Q9H251](#) Human

[SwissProt: Q99PF4](#) Mouse

[SwissProt: P58365](#) Rat

[Unigene: 656032](#) Human

[Unigene: 208796](#) Rat

Important Note:

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