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Product datasheet for RC215133

Cadherin like 23 (CDH23) (NM_052836) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cadherin like 23 (CDH23) (NM_052836) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cadherin like 23
Synonyms:	CDHR23; PITA5; USH1D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC215133 representing NM_052836
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCGCCATGTTGCCACCAGCTGCCACGTGGCCTGGCTTTTGGTGCTGATCTCTGGATGCTGGGGCC
AGGTGAACCGGCTGCCCTTCTTCACCAACCACTTCTTTGATACATACCTGCTGATCAGCGAGGACACGCC
TGTGGGTTCTTCTGTGACCCAGTTGCTGGCCCAAGACATGGACAATGACCCCCTGGTGTTTGGCGTGTCT
GGGGAGGAGGCCTCTCGCTTCTTTGCAGTGGAGCCTGACACTGGCGTGGTGTGGCTCCGGCAGCCACTGG
ACAGAGAGACCAAGTCAGAGTTCACCGTGGAGTTCTCTGTCAGCGACCACCAGGGGGTGATCACACGGAA
GGTGAACATCCAGGTCGGGGATGTGAATGACAACGCGCCCACATTTCACAATCAGCCCTACAGCGTCCGC
ATCCCTGAGAATACACCAGTGGGGACGCCCATCTTCATCGTGAATGCCACAGACCCCGACTTGGGGGCAG
GGGGCAGCGTCCTCTACTCCTTCCAGCCCCCCTCCCAATTCTTCGCCATTGACAGCGCCCGCGGTATCGT
CACAGTGATCCGGGAGCTGGACTACGAGACCACACAGGCCTACCAGCTCACGGTCAACGCCACAGATCAA
GACAAGACCAGGCCTCTGTCCACCCTGGCCAACTTGGCCATCATCATCACAGATGTCCAGGACATGGACC
CCATCTTCATCAACCTGCCTTACAGCACCAACATCTACGAGCATTCTCCTCCGGGCACGACGGTGCGCAT
CATCACCGCCATAGACCAGGATAAAGGACGTCCCCGGGGCATTGGCTACACCATCGTTTCAGGGAATACC
AACAGCATCTTTGCCCTGGACTACATCAGCGGAGTGCTGACCTTGAATGGCCTGCTGGACCGGGAGAACC
CCCTGTACAGCCATGGCTTCATCCTGACTGTGAAGGGCACGGAGCTGAACGATGACCGCACCCCATCTGA
CGCTACAGTCACCACGACCTTCAATATCCTGGTTATTGACATCAATGACAATGCCCCGGAGTTCAACAGC
TCCGAGTACAGCGTGGCCATCACTGAGCTGGCACAGGTCGGCTTTGCCCTTCCACTCTTCATCCAGGTGG
TGGACAAGGATGAGAATTTGGGCCTGAACAGCATGTTTGAGGTGTACTTGGTGGGGAACAACTCCCACCA
CTTCATCATCTCCCCGACCTCCGTCCAGGGGAAGGCGGACATTCGTATTCGGGTGGCCATCCCACTGGAC
TACGAGACCGTGGACCGCTACGACTTTGATCTCTTTGCCAATGAGAGTGTGCCTGACCATGTGGGCTATG
CCAAGGTGAAGATCACTCTCATCAATGAAAATGACAACCGGCCCATCTTCAGCCAGCCACTGTACAACAT
CAGCCTGTACGAGAACGTCACCGTGGGGACCTCTGTGCTGACAGTCCTGGTGAGTCCCCGCTTCACTGCA
GGGCCACTGAGCTCTCCAGGGCCGACTGTGGTGAGGCACCCAGAGGGATTTTGTCCAAGGGACCTCAGCA
ATCAGGGAAGGAGGCACCCCCAAATCCCTGAGCTGTGTTTGTTGGTGTAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215133 representing NM_052836
Red=Cloning site Green=Tags(s)

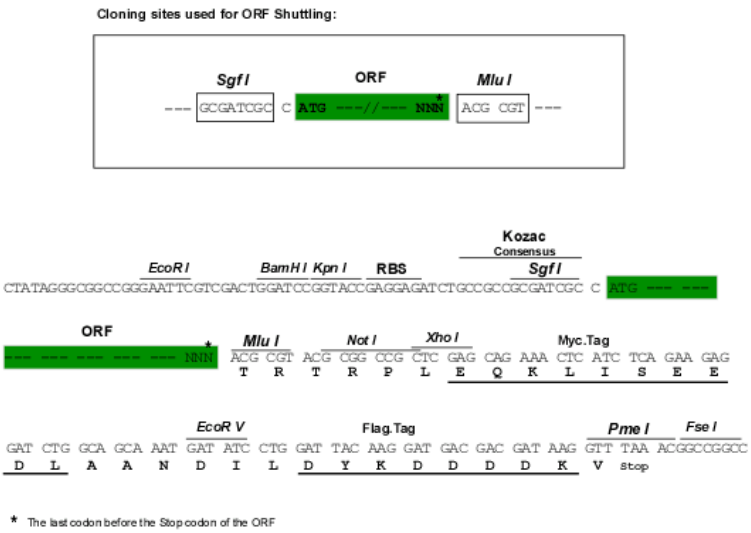
MGRHVATSCHVAWLLVLISGCWGQVNRLPFFTNHFFDTYLLISEDTPVGSSVTQLLAQDMDNDPLVFGVS
GEEASRFFAVEPDTGVVWLRQPLDRETKSEFTVEFSVSDHQGVITRKVNIQVGDVNDNAPTFHNQPYSVR
IPENTPVGTPIFIVNATDPDLGAGGSVLYSFQPPSQFFAIDSARGIVTVIRELDYETTQAYQLTVNATDQ
DKTRPLSTLANLAIIITDVQDMDPIFINLPYSTNIYEHSPPGTTVRIITAIDQDKGRPRGIGYTIVSGNT
NSIFALDYISGVLTLNGLLDRENPLYSHGFILTVKGTELNDDRTPSDATVTTTFNILVIDINDNAPEFNS
SEYSVAITELAQVGFALPLFIQVVDKDENLGLNSMFEVYLVGNNSHHFIISPTSVQGKADIRIRVAIPLD
YETVDRYDFDLFANESVPDHVGYAKVKITLINENDNRPIFSQPLYNISLYENVTVGTSVLTVLVSPRFTA
GPLSSPGPTVVRHPEGFCPRDLSNQGRRHPQIPELCLLVY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6799_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_052836

ORF Size: 1590 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_052836.4

RefSeq Size: 2022 bp

RefSeq ORF: 1593 bp

Locus ID: 64072

UniProt ID: Q9H251

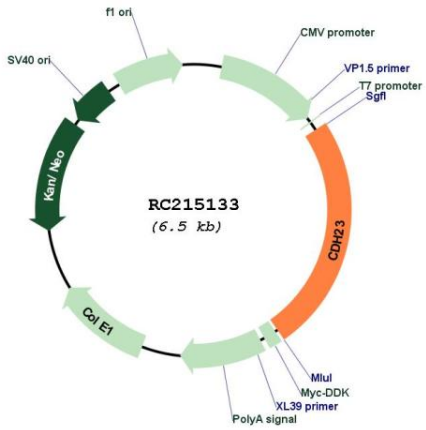
Cytogenetics: 10q22.1

Protein Families: Transmembrane

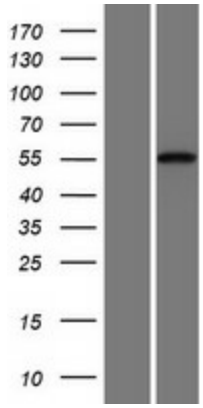
MW: 58.4 kDa

Gene Summary: 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]

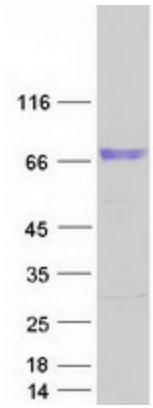
Product images:



Circular map for RC215133



Western blot validation of overexpression lysate (Cat# [LY409447]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215133 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDH23 protein (Cat# [TP315133]). The protein was produced from HEK293T cells transfected with CDH23 cDNA clone (Cat# RC215133) using MegaTran 2.0 (Cat# [TT210002]).