

Product datasheet for **RC230634**

Cadherin like 23 (CDH23) (NM_001171931) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cadherin like 23 (CDH23) (NM_001171931) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDH23
Synonyms:	CDHR23; PITA5; USH1D
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC230634 representing NM_001171931 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCGCCATGTTGCCACCAGCTGCCACGTGGCCTGGCTTTTGGTGTGATCTCTGGATGCTGGGGCC
AGGTGAACCGGTGCCCTTCTTACCAACCACTTCTTTGATACATACCTGCTGATCAGCGAGGACACGCC
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ACAGAGAGACCAAGTCAGAGTTCACCGTGGAGTCTCTGTGACGACACCAGGGGTGATCACACGGAA
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ATCCCTGAGAATACACAGTGGGGACGCCATCTTCATCGTGAATGCCACAGACCCGACTTGGGGCGAG
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GACAAGACCAGGCCTCTGTCCACCCTGGCCAACCTTGCCATCATCATCACAGATGTCCAGGACATGGACC
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CATCACCGCCATAGACCAGGATAAAGGACGTCCCGGGGATTGGCTACCCATCGTTTCAGGGAATACC
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TCATCATGCTGATTGCCAGGCTGGACTATGAGCTCATCCAGCGCTTCACCTGACGATCATTGCCCGGGA
 CCGGGGCGGCGAGGAGACCACAGGCCGGTTCAGGATCAATGTGTTGGATGTCAACGACAACGTGCCACC
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 CTGCCTCCACCCCTCCAGATGGACAGCCAGAC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence:

>RC230634 representing NM_001171931
 Red=Cloning site Green=Tags(s)

MGRHVATSCHVALLVLIISGCGVQVNRLPFFTNHFFDLYLLISEDTPVGSSTVQLLAQDMDNDPLVFGVS
 GEEASRFFAVEPDTGVVWLRQPLDRETKSEFTVEFVSDHQGVITRKVNIQVGDVNDNAPTFHNQPYSVR
 IPENTPVGTPIFIVNATDPLDAGGSVLYSFQPPSQFFAIDSARGIVTVIRELDYETTQAYQLTVNATDQ
 DKTRPLSTLANLAIITDVQMDPIFINLPYSTNIYEHSPPGTTVRIITAIQDKGRPRGIGYTIIVSGNT
 NSIFALDYISGVLTLNGLLDRENPLYSHGFILTVKGTELNDRTPSDATVTTTFNILVIDINDNAPEFNS
 SEYSVAITELAQVGFALPLFIQVVDKDENLGLNSMFEVYLVGNNSHHFIIISPTSVQKADIRIRVAIPLD
 YETVDRYDFDLFANESVDPDHVGYAKVKITLINENDNRPFSQPLYNIISLYENVTVGTSVLTVLATDNDAG
 TFGVSYFFSDDPDRFSLDKDTGLIMLIARLDYELIQRFTLTIIARDGGGEETGRVIRINLVDVNDVPT
 FQKDAYVYGALRENEPSVTQLVRLRATDEDSPPNQTITYSIVSASAFGSYFDISLYEGYGVISVSRPLDYE
 QISNGLIYLTVMAMDAGNPPLNSTVPVTIEVFENDNPPTFSKPAYFVSVVENIMAGATVLFNATDLDR
 SREYQESIISYLEGSTQFRINARSGEITTTSLLDRETKSEYILIVRAVDGGVGHNQKTGIATVNITLLD
 INDNHPTWKDAPYYINLVEMTPPDSVTTVVAVDPLGENGLVYSIQPPNKFYSLNSTTGKIRTTAML
 DRENPDHEAELMRKIVSVTDCGRPPLKATSSATVFNLLDLNDNDPTFQNLPFVAEVLEGIPAGVSIY
 QVVAIDLDEGLNGLVSYRMPVGMPRMDFLINSSGVVVTTTELDREERIAEYQLRVVASDAGTPTKSSTST
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 LPPPLPDGQPD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

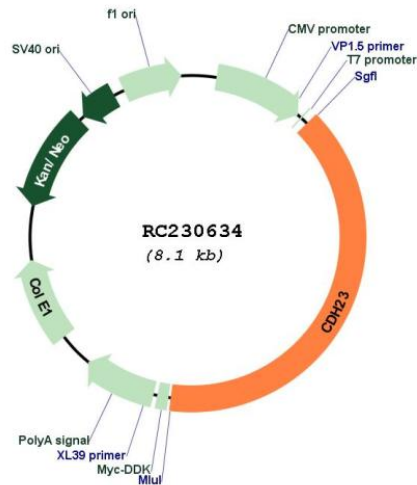
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001171931

ORF Size: 3183 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:	<ol style="list-style-type: none">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:	<u>NM_001171931.2</u>
RefSeq ORF:	3186 bp
Locus ID:	64072
UniProt ID:	<u>Q9H251</u>
Cytogenetics:	10q22.1
Protein Families:	Transmembrane
MW:	117.1 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]