

# **Product datasheet for RC229708**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Cadherin like 23 (CDH23) (NM\_001171936) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Cadherin like 23 (CDH23) (NM\_001171936) 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 >RC229708 representing NM\_001171936
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ATGCGGTCCTGGTTCCAGCAGGATCCTATGGTGGGAGCATCACACCACAGGCACCAGGGCCTCACACCCCA
AAGCCAACCCTGTGTGGCTGGATCCCTTCTGTCGGAACCTGGAGCTGGCCGCCCAGGCGGAGCATGAGGA
TGACCTACCGGAGAACCTGAGTGAGATCGCCGACCTGTGGAACAGCCCCACGCGCACCCATGGAACTTTT
GGGCGTGAGCCAGCAGCTGTCAAGCCTGATGATGACCGATACCTGCGGGCTGCCATCCAGGAGTATGACA
ACATTGCCAAGCTGGGCCAGATCATTCGTGAGGGGCCAATCAAGCTGATACAGACTGAGCTGGACGAGGA
GCCAGGAGACCACAGCCCAGGGCAGGCTAGCCTGCCTTCCGCCACAAGCCACCAGTGGAGCTCAAGGGG
CCCGATGGGATCCATGTGGTGCACGGCAGCACGGGCACGCTGCTGGCCACCGACCTCAACAGCCTGCCCG
AGGAAGACCAGAAGGGCCTGGGCCGCTCGCTGGAGACCGCTGCCCGAGGCCACTGCCTTCCGAGCG
CAACGCCCGCACAGAATCCGCCAAATCCACACCCCTGCACAAACTTCGCGACGTGATCATGGAGACCCCC
CTGGAGATCACAGAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC229708 representing NM\_001171936

Red=Cloning site Green=Tags(s)

MRSWFQQDPMVGACTTGTRASHPKANPVWLDPFCRNLELAAQAEHEDDLPENLSEIADLWNSPTRTHGTF GREPAAVKPDDDRYLRAAIQEYDNIAKLGQIIREGPIKLIQTELDEEPGDHSPGQGSLRFRHKPPVELKG PDGIHVVHGSTGTLLATDLNSLPEEDQKGLGRSLETLTAAEATAFERNARTESAKSTPLHKLRDVIMETP LEITEL

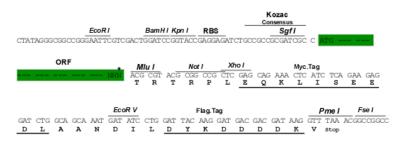
#### TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

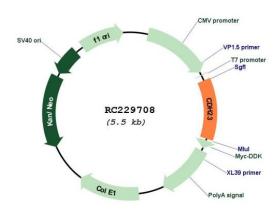
**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

#### Plasmid Map:



**ACCN:** NM\_001171936

ORF Size: 648 bp



### Cadherin like 23 (CDH23) (NM\_001171936) Human Tagged ORF Clone - RC229708

**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: <u>NM 001171936.1</u>, <u>NP 001165407.1</u>

 RefSeq ORF:
 651 bp

 Locus ID:
 64072

 UniProt ID:
 Q9H251

 Cytogenetics:
 10q22.1

**Protein Families:** Transmembrane

MW: 24.3 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]