

## Product datasheet for **RC227911**

### **CD133 (PROM1) (NM\_001145850) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CD133 (PROM1) (NM_001145850) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD133
Synonyms:	AC133; CD133; CORD12; MCDR2; MSTP061; PROML1; RP41; STGD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC227911 representing NM\_001145850  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCCTCGTACTCGGCTCCCTGTTGCTGCTGGGGCTGTGCGGAACTCCTTTTCAGGAGGCGAGCCTT  
 CATCCACAGATGCTCCTAAGGCTTGGAATTATGAATTGCCTGCAACAAATTATGAGACCCAAAGACTCCCA  
 TAAAGCTGGACCCATTGGCATTCTCTTTGAACTAGTGCATATCTTTCTCTATGTGGTACAGCCGCGTGAT  
 TTCCAGAAAGATACTTTGAGAAAATTCTTACAGAAGGCATATGAATCCAAAATTGATTATGACAAGCCAG  
 AAAGTGAATCTTAGGTCTAAAGATTGTCTACTATGAAGCAGGGATTATTCTATGCTGTGCTGGGGCT  
 GCTGTTTATTATTCTGATGCCTCTGGTGGGGTATTTCTTTTGTATGTGCTGTTGCTGTAACAAATGTGGT  
 GGAGAAATGCACCAGCGACAGAAGGAAATGGGCCCTTCTGAGGAAATGCTTTGCAATCTCCCTGTTGG  
 TGATTTGTATAATAAAGCATTGGCATCTTCTATGGTTTGTGGCAAATCACCAGGTAAGAACCCGGAT  
 CAAAAGGAGTCGAAACTGGCAGATAGCAATTTCAAGGACTTGGAACTCTTTGAACTGAACTCCAGAG  
 CAAATCAAATATATATTGCCAGTACAACACTACCAAGGACAAGGCGTTACAGATCTGAACAGTATCA  
 ATTCAGTGCTAGGAGGCGGAATCTTGACCGACTGAGACCCAACATCATCCCTGTTCTTGATGAGATTAA  
 GTCCATGGCAACAGCGATCAAGGAGACCAAGAGGCGTTGGAGAACATGAACAGCACCTTGAAGAGCTTG  
 CACCAACAAAGTACACAGCTTAGCAGCAGTCTGACCAGCGTGAAGAACTAGCCTGCGGTACTCTCAATG  
 ACCCTCTGTGCTTGGTGCATCCATCAAGTGAACCTGCAACAGCATCAGATTGTCTCTAAGCCAGCTGAA  
 TAGCAACCCTGAAGTGGCAGCTTCCACCCGTTGGATGCAGAACTTGACAACGTTAATAACGTTCTTAGG  
 ACAGATTTGGATGGCCTGGTCCAACAGGGCTATCAATCCCTTAATGATATACCTGACAGAGTACAACGCC  
 AAACCCAGACTGTGCTAGCAGGTATCAAAAGGGTCTTGAATTCATTGGTTGAGATATCGACAATGTAAC  
 TCAGCGTCTTCTATTACAGGATATACTCTCAGCATTCTCTGTTTATGTTAATAACACTGAAAGTTACATC  
 CACAGAAATTTACCTACATTGGAAGAGTATGATTCACTGCTGGTGGCTGGTGGCCTGGTCACTGCTCTC  
 TGCTGACCCTCATCGTATTTTTACTACCTGGGCTTACTGTGTGGCGTGTGCGGCTATGACAGGCATGC  
 CACCCCGACCACCGAGGCTGTGCTCCAACACCGGAGGCGTCTTCTCATGGTTGGAGTTGGATTAAGT  
 TTCCTCTTTGCTGGATATTGATGATCATTGTGGTTCTTACCTTTGTCTTTGGTGCAAATGTGGAAAAAC  
 TGATCTGTGAACCTTACACGAGCAAGGAATTTCCGGGTTTTGGATACACCTACTTACTAAATGAAGA  
 CTGGGAATACTATCTCTCTGGGAAGCTATTTAATAAATCAAAAAATGAAGCTCACTTTTGAACAAGTTTAC  
 AGTGACTGCAAAAAAATAGAGGCACTTACGGCACTCTTACCTGCAGAACAGCTTCAATATCAGTGAAC  
 ATCTCAACATTAATGAGCATACTGGAAGCATAAGCAGTGAATTGGAAAGTCTGAAGGTAAATCTTAATAT  
 CTTTCTGTTGGGTGCAGCAGGAAGAAAAACCTTCAGGATTTTGTGCTTGTGGAATAGACAGAATGAAT  
 TATGACAGCTACTTGGCTCAGACTGGTAAATCCCCCGCAGGAGTGAATCTTTTATCATTTGCATATGATC  
 TAGAAGCAAAAGCAAACAGTTTGGCCCCAGGAAATTTGAGGAACTCCCTGAAAAGAGATGCACAACTAT  
 TAAAACAATTCACCAGCAACGAGTCCTTCTATAGAACAATCACTGAGCACTCTATACCAAAGCGTCAAG  
 ATACTTCAACGCACAGGGAATGGATTGTTGGAGAGAGTAACTAGGATTCTAGCTTCTCTGGATTTTGCTC  
 AGAAGTTCATCACAACAATACTTCTCTGTTATTATTGAGGAACTAAGAAGTATGGGAGAACAATAAT  
 AGGATATTTTGAACATTATCTGCAGTGGATCGAGTTCTCTATCAGTGAGAAAGTGGCATCGTGCAAACCT  
 GTGGCCACCGCTCTAGATACTGCTGTTGATGTCTTTCTGTGTAGCTACATTATCGACCCCTTGAATTTGT  
 TTTGGTTTGGCATAGGAAAAGCTACTGATTTTTACTTCCGGCTCTAATTTTTGCGGTA AAACTGGCTAA  
 GTACTATCGTCAATGGATTCCGAGGACGTGTACGATGACCCATCACAACAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC227911 representing NM\_001145850  
Red=Cloning site Green=Tags(s)

MALVLGSLLLLGLCGNSFSGGQPSSTDAPKAWNYELPATNYETQDSHKAGPIGILFELVHIFLYVYVQPRD  
FPEDTLRKFLQKAYESKIDYDKPETVILGLKIVYYEAGIILCCVLGLLFIILMPLVGYFFCMCRCCNKCG  
GEMHQKQKENGPFRLKCF AISLLVICIIISIGIFYGFVANHQVTRIKRSRKLADSNFKDLRLLNETPE  
QIKYILAQYNTTKDKAFDLNSINSVLGGGILDRLRPNIIPVLDEIKSMATAIKETKEALENMNSTLKSL  
HQQSTQLSSSLTSVKTSRSSLNDPLCLVHPSSETCNSIRLSLSQLNSNPELRQLPPVDAELDNVNNVLR  
TDLDGLVQQGYQSLNDIPDRVQRQT TTVVAGIKRVLNSIGSDIDNVTQRLPIQDILSAFSVYVNTESYI  
HRNLPTLEEYDSYWLGGLVICSLTLIVIFYLGLLCGVCYDRHATPTTRGCVSNTGGVFLMVGVLGSL  
FLFCWILMIIVLTFVFGANVEKLICEPYTSKELFRVLDTPYLLNEDWEYLSGKLFNKSMMKLTFEQVY  
SDCKKNRGTGTLHLQNSFNISEHLNINEHTGSISSELESKVNLNIFLLGAAGRKNLQDFAACGIDRMN  
YDSYLAQTGKSPAGVNLFSFAYDLEAKANSLPPGNLRNSLKRDAQTIKTIHQQRVLP IEQSLSTLYQSVK  
ILQRTGNGLLERVTRILASLDF AQNFITNNTSSVIEETKKYGRTIIGYFEHYLQWIEFSISEKVASCKP  
VATALDTAVDVFLCSYIIDPLNLFWFGIGKATVFLPALIFAVKLAKYRRMDS EDVYDDPSQH

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001145850

**ORF Size:** 2502 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\\_001145850.2](#)

**RefSeq ORF:** 2505 bp

**Locus ID:** 8842

**UniProt ID:** [O43490](#)

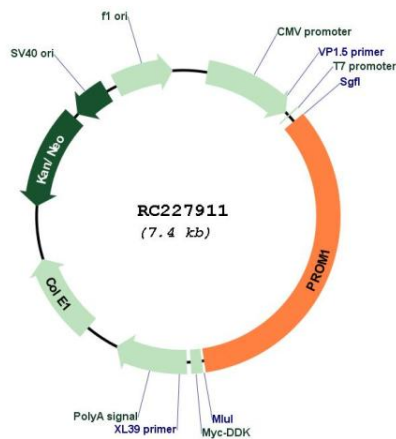
**Cytogenetics:** 4p15.32

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

**MW:** 93.5 kDa

**Gene Summary:** This gene encodes a pentaspan transmembrane glycoprotein. The protein localizes to membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. Mutations in this gene have been shown to result in retinitis pigmentosa and Stargardt disease. Expression of this gene is also associated with several types of cancer. This gene is expressed from at least five alternative promoters that are expressed in a tissue-dependent manner. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

### Product images:



Circular map for RC227911