

Product datasheet for **SC326502**

CD133 (PROM1) (NM_001145847) Human Untagged Clone

Product data:

| | |
|---------------------------|-----------------------------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | CD133 (PROM1) (NM_001145847) Human Untagged Clone |
| Tag: | Tag Free |
| 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 »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001145847, the custom clone sequence may differ by one or more nucleotides

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ATGGCCCTCGTACTCGGCTCCCTGTTGCTGCTGGGGCTGTGCGGGAACCTCTTTTCAGGAGGCGAGCCTT
CATCCACAGATGCTCCTAAGGCTTGAATTATGAATTGCCTGCAACAAATATGAGACCCAAGACTCCCA
TAAAGCTGGACCCATTGGCATTCTCTTTGAACTAGTGCATATCTTTCTATGTGGTACAGCCGCGTGT
TTCCCAGAAAGATACTTTGAGAAAATTCTTACAGAAGGCATATGAATCCAAAATTGATTATGACAAGATTG
TCTACTATGAAGCAGGGATTATTCTATGCTGTGTCTGGGGCTGTGTTTATTATTCTGATGCCTCTGGT
GGGGTATTTCTTTGTATGTGTCGTTGCTGTAACAAATGTGGTGGAGAAATGCACCAGCGACAGAAGGAA
AATGGGCCCTTCTGAGGAAATGCTTTGCAATCTCCCTGTTGGTATTGTATAATAAAGCATTGGCA
TCTTCTATGTTTTGTGGCAAATCACCAGTAAGAACCCGGATCAAAGGAGTTCGAAACTGGCAGATAG
CAATTTCAAGGACTTGCAACTCTTGAATGAACTCCAGAGCAAATCAAATATATATTGGCCAGTAC
AACACTACCAAGGACAAGGCGTTCACAGATCTGAACAGTATCAATTCAGTCTAGGAGGCGGAATCTTG
ACCGACTGAGACCAACATCATCCCTGTTCTTGATGAGATTAAGTCCATGGCAACAGCGATCAAGGAGAC
CAAAGAGGCGTTGAGAAACATGAACAGCACCTTGAAGAGCTTGACCAACAAAGTACACAGCTTAGCAGC
AGTCTGACCAGCGTGAAAACCTAGCCTGCGGTATCTCTCAATGACCCCTGTGCTTGGTGCATCCATCAA
GTGAAACCTGCAACAGCATCAGATTGTCTTAAGCCAGCTGAATAGCAACCCTGAACTGAGGCAGCTTCC
ACCCGTGGATGCAGAACTTGACAACGTTAATAACGTTCTTAGGACAGATTTGGATGGCCTGGTCCACAG
GGCTATCAATCCCTTAATGATATACCTGACAGAGTACAACGCCAAACCACGACTGTGCTAGCAGGTATCA
AAAGGGTCTTGAATCCATTGGTTCAGATATCGACAATGTAACCTCAGCGTCTTCTATTCCAGGATATACT
CTCAGCATCTCTGTTTTATGTTAATAACACTGAAAGTTACATCCACAGAAATTTACCTACATTGGAAGAG
TATGATTCATACTGGTGGCTGGTGGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
ACCTGGGCTTACTGTGTGGCTGTGCGGCTATGACAGGCATGCCACCCGACCACCCGAGGCTGTGTCTC
CAACACCGGAGGCGTCTTCTCATGTTGGAGTTGGATTAAGTTTCTCTTTTGTGGATATTGATGATC
ATTGTGGTCTTACCTTTGTCTTTGGTGCAAATGTGGAACAACTGATCTGTGAACCTTACACGAGCAAGG
AATTATCCGGGTTTTGGATACACCCTACTTACTAAATGAAGACTGGGAATACTATCTCTCTGGGAGCT
ATTTAATAAAATCAAAAATGAAGCTCACTTTTGAACAAGTTTACAGTGACTGCAAAAAAATAGAGGCACT
TACGGCACTTTCACCTGCAGAACAGCTTCAATATCAGTGAACATCTCAACATTAATGAGCATACTGGAA
GCATAAGCAGTGAATTGGAAGTCTGAAGTAAATCTTAATATCTTTCTGTTGGTGCAGCAGGAAGAAA
AAACCTCAGGATTTTGTGCTTGTGGAATAGACAGAATGAATTATGACAGCTACTTGGCTCAGACTGGT
AAATCCCCCGCAGGAGTGAATCTTTATCATTTCATATGATCTAGAAGCAAAAGCAAACAGTTTGGCCC
CAGGAAATTTGAGGAACTCCCTGAAAAGAGATGCACAACTATTAACAAATTCACCAGCAACGAGTCTCT
TCCTATAGAACAATCACTGAGCACTCTATACCAAAGCGTCAAGATACTTCAACGCACAGGGAATGGATTG
TTGGAGAGAGTAACTAGGATTCTAGCTTCTCTGGATTTTGTCTCAGAACTTATCAAAAATACTTCTCT
CTGTTATTATTGAGGAACTAAGAAGTATGGGAGAACAATAATAGGATATTTTGAACATTATCTGCAGTG
GATCGATTCTCTATCAGTGAGAAAGTGGCATCGTGCAACCTGTGGCCACCGCTCTAGATACTGCTGTT
GATGCTTTCTGTGTAGCTACATTATCGACCCCTTGAATTTGTTTTGGTTTGGCATAGGAAAAGCTACTG
TATTTTTACTTCCGGCTCAATTTTTGCGGTAAAACCTGGCTAAGTACTATCGTCGAATGGATTTCGGAGGA
CGTGACGATGATGTTGAAACTATACCATGAAAATATGGAAAATGGTAATAATGGTTATCATAAAGAT
CATGTATATGGTATTCACAATCCTGTTATGACAAGCCCATCAACAATTGA
    
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Restriction Sites: Please inquire
ACCN: NM_001145847

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001145847.1](#), [NP_001139319.1](#)

RefSeq Size: 4257 bp

RefSeq ORF: 2571 bp

Locus ID: 8842

UniProt ID: [O43490](#)

Cytogenetics: 4p15.32

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

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]

Transcript Variant: This variant (2) represents one of several alternative promoters and 5' UTRs, and lacks an alternative in-frame exon in the 5' coding region, compared to variant 1. The resulting isoform (2), also known as s1, lacks a 9 aa segment near the N-terminus, compared to isoform 1. Both variants 2 and 3 encode the same isoform. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.