

Product datasheet for **RG227854**

CD133 (PROM1) (NM_001145847) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD133 (PROM1) (NM_001145847) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CD133
Synonyms:	AC133; CD133; CORD12; MCDR2; MSTP061; PROML1; RP41; STGD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG227854 representing NM_001145847
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCTCGTACTCGGCTCCCTGTTGCTGCTGGGGCTGTGCGGAACTCCTTTTCAGGAGGCGAGCCTT
 CATCCACAGATGCTCCTAAGGCTTGAATTATGAATTGCCTGCAACAAATTATGAGACCCAAAGACTCCCA
 TAAAGCTGGACCCATTGGCATTCTCTTTGAACTAGTGCATATCTTTCTCTATGTGGTACAGCCGCGTGAT
 TTCCAGAAAGATACTTTGAGAAAATTCTTACAGAAGGCATATGAATCCAAAATTGATTATGACAAGATTG
 TCTACTATGAAGCAGGGATTATTCTATGCTGTGCTCTGGGGCTGCTGTTTATTATTCTGATGCCTCTGGT
 GGGGTATTTCTTTGTATGTGTCGTTGCTGTAACAAATGTGGTGGAGAAATGCACCAGCGACAGAAGGAA
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 CGTGATGATGTTGAACTATACCATGAAAAATATGAAAAATGGTAATAATGGTTATCATAAAGAT
 CATGTATATGGTATTCACAATCTGTTATGACAAGCCCATCACAACAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG227854 representing NM_001145847
Red=Cloning site Green=Tags(s)

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MALVLGSLLLLGLCGNSFSGGQPSSTDAPKAWNYELPATNYETQDSHKAGPIGILFELVHIFLYVQPRD
FPEDTLRKFQKAYESKIDYDKIVVYEAGIILCCVLGLLFIILMPLVGYFFCMCRCCNCKGGEMHQROKE
NGPFLRKCFAISLLVICIIISIGIFYGFVANHQVRTRIKRSRKLADSNFKDLRLLNETPEQIKYILAQY
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SLTSVKTSLRSSLNDPLCLVHPSETCNSIRLSLSQLNSNPELRQLPPVDAELDNVNNVLRDLDGLVQQ
GYQSLNDIPDRVQRQTTTVVAGIKRVLNSIGSDIDNVTQRLPIQDILSAFVYVNNNTESYIHRNLPLEE
YDSYWWLGGLVICSLTLLIVIFYLGLLCGVCYDRHATPTTRGCVSNTGGVFLMVGVLGSLFCWILMI
IVVLTFFVGFANVEKLICEPYTSKELFRVLDTPYLLNEDWEYYL SGKLFNKSKMKL TFEQVYSDCKKNRGT
YGTLHLQNSFNISEHLNINEHTGSI SSELESKVNLFLLGAAGRKNLQDFAACGIDRMNYDSYLAQTG
KSPAGVNLLSFAYDLEAKANSLPPGNLRNSLKRDAQTIKTIHQQRVLP IEQSLSTLYQSVKILQRTGNL
LERVTRILASLDF AQNFITNNTSSVII EETKKGRTIIGYFEHYLQWIEFSISEKVASCKPVATALDTAV
DVFLCSYIIDPLNLFWFGIGKATVFLLPALIFAVKLAKYRRMSEDVYDDVETIPMKNMENGNNGYHKD
HVGIIHNPVMTSPSQH
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:


ACCN: NM_001145847

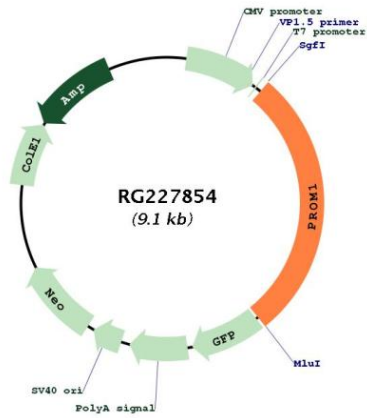
ORF Size: 2568 bp

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 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:	NM_001145847.2
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]

Product images:



Circular map for RG227854