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Product datasheet for RG202087

Oligodendrocyte Specific Protein (CLDN11) (NM_005602) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Oligodendrocyte Specific Protein (CLDN11) (NM_005602) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Oligodendrocyte Specific Protein
Synonyms:	HLD22; OSP; OTM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG202087 representing NM_005602
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGCCACGTGCCTGCAGGTGGTGGGCTTCGTCACGAGCTTCGTGGGCTGGATCGGGGTCATCGTGA
CCACCTCCACCAATGACTGGGTGGTGACCTGCGGCTACACCATCCCCACCTGCCGCAAGCTGGATGAGCT
GGGCTCCAAGGGGCTGTGGGCCGACTGCGTCATGGCCACGGGGCTGTACCACTGCAAGCCCCTGGTGGAC
ATCCTCATCCTGCCGGGCTACGTGCAGGCCTGCCGCGCCCTGATGATTGCTGCCTCGGTCCTGGGTCTGC
CGGCCATTTTACTGCTGCTGACTGTTCTTCCCTGCATCCGGATGGGCCAGGAGCCCGGTGTGGCTAAGTA
CAGGCGGGCCCAGCTGGCTGGTGTTTTGCTCATTCTGCTGGCTCTCTGCGCCCTTGTTGCCACCATCTGG
TTCCCTGTGTGCGCCCACCGTGAGACCACCATCGTGAGCTTTGGCTACTCCCTGTATGCAGGCTGGATTG
GTGCTGTGCTGTGCCTCGTGGGTGGCTGTGTCATCCTCTGCTGCGCTGGAGATGCCCAGGCCTTTGGTGA
AAACCGTTTCTACTACACTGCGGGCTCTAGCTCCCCGACTCATGCGAAGAGTGCCCACGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG202087 representing NM_005602
Red=Cloning site Green=Tags(s)

MVATCLQVVGFVTSFVGWIGVIVTTSTNDWVVTCGYTIPTCRKLDELGSKGLWADCVMATGLYHCKPLVD
ILILPGYVQACRALMIAASVLGLPAILLLLTVLPCIRMGQEPGVAKYRRAQLAGVLLILLALCALVATIW
FPVCAHRETTIVSFGYSLYAGWIGAVLCLVGGCVILCCAGDAQAFGENRFYYTAGSSSPTHAKSAHV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

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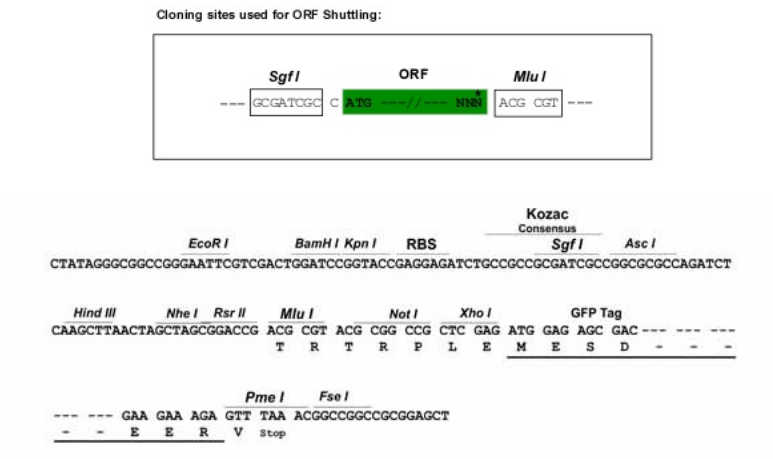
Cloning Scheme:



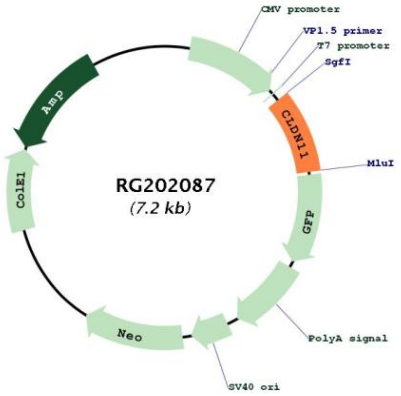
ACCN:	NM_005602
ORF Size:	621 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_005602.6
RefSeq Size:	2169 bp
RefSeq ORF:	624 bp
Locus ID:	5010
UniProt ID:	O75508
Cytogenetics:	3q26.2

Protein Families: Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction

Gene Summary: This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. The protein encoded by this gene is a major component of central nervous system (CNS) myelin and plays an important role in regulating proliferation and migration of oligodendrocytes. Mouse studies showed that the gene deficiency results in deafness and loss of the Sertoli cell epithelial phenotype in the testis. This protein is a tight junction protein at the human blood-testis barrier (BTB), and the BTB disruption is related to a dysfunction of this gene. Alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Aug 2010]

Product images:



Circular map for RG202087