

Product datasheet for RC202087

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: Myc-DDK
Symbol: Oligodendrocyte Specific Protein
Synonyms: HLD22; OSP; OTM
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202087 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGTGGCCACGTGCCTGCAGGTGGTGGGCTTCGTCACGAGCTTCGTTGGGCTGGATCGGGGTCATCGTGA
 CCACCTCCACCAATGACTGGGTGGTGACCTGCGGCTACACCATCCCCACCTGCCGCAAGCTGGATGAGCT
 GGGCTCCAAGGGCTGTGGGCCGACTGCGTCATGGCCACGGGGCTGTACCACTGCAAGCCCTGGTGGAC
 ATCCTCATCTGCCGGGCTACGTGCAGGCTGCCGCGCCCTGATGATTGCTGCCTCGTCTGGTCTGGTCTG
 CGCCATTTACTGCTGCTGACTGTTCTCCCTGCATCCGGATGGCCAGGAGCCCGGTGTGGCTAAGTA
 CAGGCGGGCCAGCTGGCTGGTGTGTTGCTCATTCTGCTGGCTCTCTGCGCCCTTGTGCCACCATCTGG
 TTCCCTGTGTGCCCCACCGTGAGACCACCATCGTGAGCTTTGGCTACTCCCTGTATGCAGGCTGGATTG
 GTGCTGTGCTGTGCCTCGTGGTGGCTGTGTCATCCTCTGCTGCGCTGGAGATGCCAGGCCTTTGGTGA
 AAACCGTTTCTACTACTGCGGGCTCTAGTCCCCGACTCATGCGAAGAGTGCCACCGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202087 protein sequence
 Red=Cloning site Green=Tags(s)

MVATCLQVVGFTSFGVWIGVIVTTSTNDWVVTGTYIPTCRKLDLGSKGLWADCVMATGLYHCKPLVD
 ILILPGYVQACRALMIAASVGLPAILLLLTVLPCIRMGQEPGVAKYRRAQLAGVLLILLALCALVATIIW
 FPVCAHRETTIIVSFGYSLYAGWIGAVLCLVGGCVILCCAGDAQAFGENRFYYTAGSSSPHAKSAHV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6308_d05.zip

Restriction Sites: SgfI-MluI

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](#)

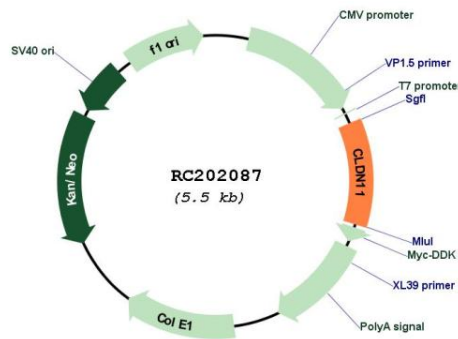
RefSeq Size: 2761 bp

RefSeq ORF: 624 bp

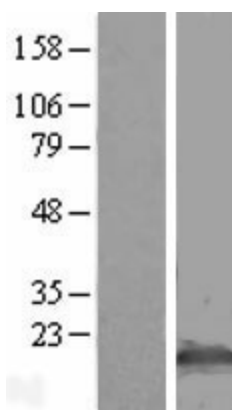
Locus ID: 5010

UniProt ID: [O75508](#)
Cytogenetics: 3q26.2
Protein Families: Transmembrane
Protein Pathways: Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
MW: 22 kDa
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 RC202087



Western blot validation of overexpression lysate (Cat# [LY417194]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202087 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).