

Product datasheet for **RG204466**

Claudin 1 (CLDN1) (NM_021101) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 1 (CLDN1) (NM_021101) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Claudin 1
Synonyms:	CLD1; ILVASC; SEMP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204466 representing NM_021101 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAACGCGGGGCTGCAGCTGTTGGGCTTCATTCTCGCCTTCTGGGATGGATCGGCGCCATCGTCA
GCACTGCCCTGCCCCAGTGGAGGATTTACTCCTATGCCGGCGACAACATCGTGACCGCCAGGCCATGTA
CGAGGGGCTGTGGATGTCCTGCGTGTGCGAGAGCACCGGGCAGATCCAGTGCAAAGTCTTTGACTCCTTG
CTGAATCTGAGCAGCACATTGCAAGCAACCCGTGCCTTGATGGTGGTTGGCATCCTCTGGGAGTGATAG
CAATCTTTGTGGCCACCGTTGGCATGAAGTGTATGAAGTGCTTGAAGACGATGAGGTGCAGAAGATGAG
GATGGCTGTCAATGGGGCGCGATATTTCTTCTGCAGGTCTGGCTATTTTAGTTGCCACAGCATGGTAT
GGCAATAGAATCGTTCAAGAATTCTATGACCCTATGACCCAGTCAATGCCAGGTACGAATTTGGTCAGG
CTCTCTTCACTGGCTGGGCTGCTGCTTCTCTGCTTCTGGGAGGTGCCCTACTTTGCTGTTCTGCTCC
CCGAAAAACAACCTCTTACCCAACCAAGGCCATCCAAAACCTGCACCTTCCAGCGGGAAAGACTAC
GTG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204466 representing NM_021101
 Red=Cloning site Green=Tags(s)

MANAGLQLLGFILAFILGWIGAIIVSTALPQWRIYSYAGDNIVTAQAMYEGLWMSCVSQSTGGQIQCKVFDSL
 LNLSSTLQATRALMVVIGILLGVIAIFVATVGMKCMKCLEDEDEVQKMRMAVIGGAIFLLAGLAILVATAWY
 GNRIVQEFYDPMTPVNARYEFGQALFTGWAAASLCLLGGALLCCSCPRKTTSYTPRYPYKPPAPSSGKDY
 V

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021101

ORF Size: 633 bp

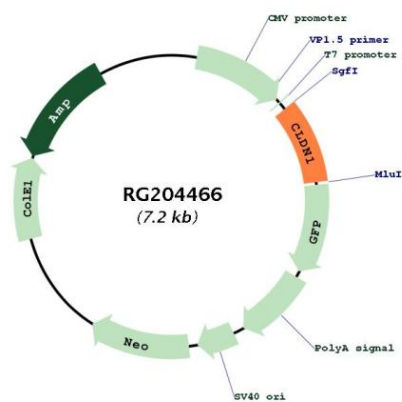
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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_021101.1
RefSeq Size:	3445 bp
RefSeq ORF:	636 bp
Locus ID:	9076
UniProt ID:	O95832
Cytogenetics:	3q28
Domains:	PMP22_Claudin
Protein Families:	Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Pathogenic Escherichia coli infection, Tight junction
Gene Summary:	Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. Loss of function mutations result in neonatal ichthyosis-sclerosing cholangitis syndrome. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG204466