

Product datasheet for **MG202442**

Cldn5 (NM_013805) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cldn5 (NM_013805) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Cldn5
Synonyms: AI854493; MBEC1; Tmvc; Tmvcf
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG202442 representing NM_013805
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGTCTGCAGCGTTGAAATTCTGGGTCTGGTGTGTCTGGTAGGATGGGTGGGCTTGATCCTGG
CGTGTGGGCTGCCATGTGGCAGGTGACTGCCTTCCTGGACCACAACATCGTGACGGCGCAGACGACTTG
GAAGGGGCTGTGGATGTCGTGCGTGGTGCAGAGTACCGGGCACATGCAGTGCAAGGTGTGAATCTGTG
CTGGCGCTGAGTGGGAGGTGCAGGCAGCTCGGGCACTACCGTGGCGCTGTGCTGCTGGCGCTGGTGG
CACTCTTTGTTACCTTGACCGCGCTCAGTGCACCACCTGCGTGGCCCCGGGCCAGTTAAGGCACGGGT
AGCACTACGGGAGGAGCGCTTTACGCGGTGTGCGGGCTGCTGGCACTCGTGCCGCTCTGCTGGTTCCGC
AACATCGTTGTCGCGAGTTCTATGATCCGACGGTGCCGGTGTACAGAAAGTACGAGCTGGGCGCGGCGC
TGTACATCGGCTGGGCGGCTCCGCACTGCTCATGTGCGGTGGCGGCTCGTGTGTTGCGGCGCTGGGT
CTGCACCGGGCGCCTGAGTTCAGCTTCCCGTCAAGTACTCTGCGCCGCGGCGGCCACGGCCAATGGC
GATTACGACAAGAAGAACTATGTC

ACGCGTACGCGGCGGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG202442 representing NM_013805
 Red=Cloning site Green=Tags(s)

MGSAALEILGLVLCLVGWVGLILACGLPMWQVTAFLDHNIVTAQTTWKGLWMSCVVQSTGHMQCKVYESV
 LALSAEVQAARALTVGAVLLALVALFVTLTGAQCTTCVAPGPVKARVALTGGALYAVCGLLALVPLCWFA
 NIVVREFYDPTVPVSQKYELGAALYIGWAASALLMCGGGLVCCGAWVCTGRPEFSFPVKYSAPRRPTANG
 DYDKKNYV

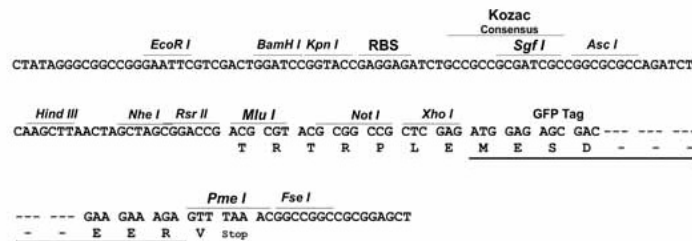
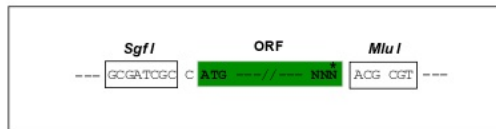
TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1833_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_013805

ORF Size: 654 bp

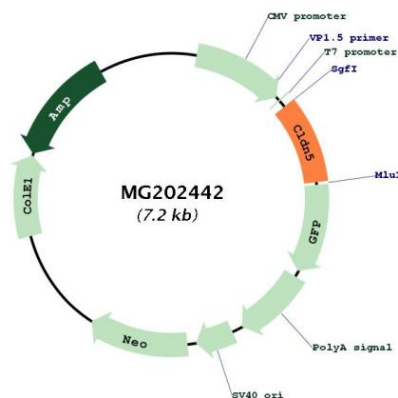
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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_013805.4
RefSeq Size:	1415 bp
RefSeq ORF:	657 bp
Locus ID:	12741
UniProt ID:	O54942
Cytogenetics:	16 11.63 cM
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 critical component of endothelial tight junctions that control pericellular permeability. The knockout mice lacking this gene died within 10 h of birth and the blood-brain barrier in these mice against small molecules was selectively affected. This gene is expressed strongly in endothelium of normal lung and plays a regulation role during acrolein-induced acute lung injury. [provided by RefSeq, Aug 2010]

Product images:



Circular map for MG202442