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Product datasheet for MG225223

Cldn18 (NM_001194921) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cldn18 (NM_001194921) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cldn18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG225223 representing NM_001194921
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGGTGACCGCCTGCCAGGGCTTGGGGTTTGTGGTGTCACTGATCGGGTTTGCGGGCATCATTGCAG
CCACTTGTATGGACCAGTGGAGCACCCAGGATTTATACAACAACCCGGTGACCGCTGTATTCAACTACCA
AGGGCTATGGCGTTCATGCGTCCGAGAGAGCTCTGGCTTCACCGAGTGCCGAGGCTACTTCACCCTGTTG
GGGTTGCCAGCCATGCTGCAAGCTGTACGAGCCCTGATGATCGTGGGCATTGTTCTGGGGGTCATCGGTA
TCCTCGTGTCCATCTTCGCCCTGAAGTGCATTCGCATTGGTAGCATGGATGACTCTGCCAAGGCCAAGAT
GACTCTGACTTCTGGGATCTTGTTCATCATCTCCGGCATCTGTGCAATCATTGGTGTGTCTGTGTTTGCC
AACATGCTGGTGACCAACTTCTGGATGTCCACAGCTAACATGTACAGCGGCATGGGCGGCATGGGTGGCA
TGGTGCAGACCGTTCAGACCAGGTACACCTTTGGTGCAGCTCTGTTCGTGGGCTGGGTTGCTGGAGGCCT
CACCCTGATTGGGGGAGTGATGATGTGCATCGCCTGCCGTGGCCTGACACCAGATGACAGCAACTTCAAA
GCTGTGTCTTACCATGCCTCTGGCCAAAATGTTGCCTACAGGCCTGGAGGCTTTAAGGCCAGCACTGGCT
TTGGGTCCAACACCAGAAACAAGAAGATCTACGATGGGGGTGCCCGCACAGAAGACGATGAACAGTCTCA
TCCTACCAAGTATGACTATGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

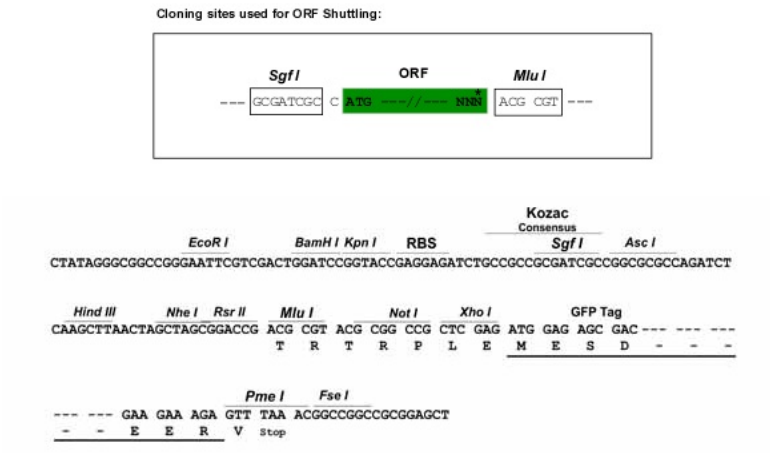
>MG225223 representing NM_001194921
Red=Cloning site Green=Tags(s)

MSVTACQGLGFVVSLIGFAGIIAATCMDQWSTQDLYNNPVTAVFNYQGLWRSCVRESSGFTECRGYFTLL
GLPAMLQAVRALMIVGIVLGVIGILVSIFALKCIRIGSMDDSAKAKMTLTSGILFIISGICAIIGVSVFA
NMLVTNFWMSTANMYSGMGGMGGMVQTVQTRYTFGAALFVGWVAGGLTLIGGVMMCIACRGLTPDDSNFK
AVSYHASGQNVAYRPGGFKASTGFGSNTRNKKIYDGGARTEDDEQSHPTKYDYV

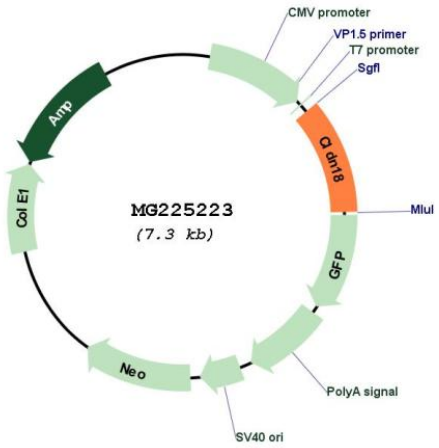
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001194921

ORF Size: 792 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_001194921.1, NP_001181850.1
RefSeq Size:	2774 bp
RefSeq ORF:	795 bp
Locus ID:	56492
UniProt ID:	P56857
Cytogenetics:	9 E3.3
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. This gene is a downstream target gene regulated by the T/EBP/NKX2.1 homeodomain transcription factor. Four alternatively spliced transcript variants resulted from alternative promoters and alternative splicing have been identified, which encode two lung-specific isoforms and two stomach-specific isoforms respectively. This gene is also expressed in colons, inner ear and skin, and its expression is increased in both experimental colitis and ulcerative colitis. [provided by RefSeq, Aug 2010]