

## Product datasheet for **RG219760**

### Claudin18 (CLDN18) (NM\_001002026) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin18 (CLDN18) (NM_001002026) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Claudin18
Synonyms:	SFTA5; SFTPJ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219760 representing NM_001002026 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGTGACTGCCTGTCAGGGCTTGGGGTTCGTGGTTTCACTGATTGGGATTGCGGGCATCATTGCTG  
CCACCTGCATGGACCAGTGGAGCACCCAAGACTTGTACAACAACCCCGTAACAGCTGTTTTCACTACCA  
GGGGCTGTGGCGCTCCTGTGTCCGAGAGAGCTCTGGCTTACCGAGTGCCGGGGCTACTTACCCTGCTG  
GGGCTGCCAGCCATGCTGCAGGCAGTGCAGCCCTGATGATCGTAGGCATCGTCTGGGTGCCATTGGCC  
TCCTGGTATCCATCTTTGCCCTGAAATGCATCCGATTGGCAGCATGGAGGACTCTGCCAAGCCAACAT  
GACACTGACCTCCGGGATCATGTTTCATTGTCTCAGGCTTTGTGCAATTGCTGGAGTGTCTGTGTTGCC  
AACATGCTGGTGACTAACTTCTGGATGTCCACAGCTAACATGTACACCGCATGGGTGGGATGGTGCAGA  
CTGTTTCAGACCAGGTACACATTTGGTGC GGCTCTGTTTCGTGGGCTGGGTGCTGGAGGCCTCACACTAAT  
TGGGGGTGTGATGATGTGCATCGCTGCCGGGGCTGGCACCAGAAGAAACCAACTACAAAGCCGTTTCT  
TATCATGCCTCAGGCCACAGTGTTCCTACAAGCCTGGAGGCTTCAAGGCCAGCACTGGCTTTGGGTCCA  
ACACCAAAAACAAGAAGATATACGATGGAGGTGCCCGCACAGAGGACGAGGTACAATCTTATCCTTCCAA  
GCACGACTATGTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG219760 representing NM\_001002026  
 Red=Cloning site Green=Tags(s)

MAVTACQGLGFVVSLIGIAGIIAATCMDQWSTQDLNNPVTAVFNYQGLWRSCVRESSGFTECRGYFTLL  
 GLPAMLQAVRALMIVGIVLGAIGLLVSIFALKCIRIGSMEDSAKANMTLTSGIMFIVSGLCAIAGVSVFA  
 NMLVTNFWMSTANMYTGMGGMVQTVQTRYTFGAALFVGWVAGGLTLIGGVMMCIACRGLAPEETNYKAVS  
 YHASGHSVAYKPGGFKASTGFGSNTKNKKIYDGGARTEDEVQSYPSKHDYV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001002026

**ORF Size:** 783 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\\_001002026.3](#)

**RefSeq Size:** 3350 bp

**RefSeq ORF:** 786 bp

**Locus ID:** 51208

**UniProt ID:** [P56856](#)

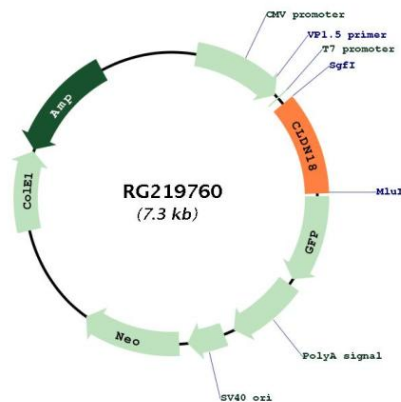
**Cytogenetics:** 3q22.3

**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. This gene is upregulated in patients with ulcerative colitis and highly overexpressed in infiltrating ductal adenocarcinomas. PKC/MAPK/AP-1 (protein kinase C/mitogen-activated protein kinase/activator protein-1) dependent pathway regulates the expression of this gene in gastric cells. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jun 2010]

## Product images:



Circular map for RG219760