

Product datasheet for **RG200530**

Claudin 7 (CLDN7) (NM_001307) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 7 (CLDN7) (NM_001307) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Claudin 7
Synonyms:	CEPTRL2; claudin-1; CLDN-7; CPETRL2; Hs.84359
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200530 representing NM_001307 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAATTCGGGCCTGCAGTTGCTGGGCTTCTCCATGGCCCTGCTGGGCTGGGTGGTCTGGTGGCCT
GCACCGCCATCCCGCAGTGGCAGATGAGCTCCTATGCGGGTGACAACATCATCACGGCCAGGCCATGTA
CAAGGGGCTGTGGATGGACTGCGTCACGCAGAGCACGGGGATGATGAGCTGCAAATGTACGACTCGGTG
CTCGCCCTGTCCGCGCCTTGCAGGCCACTCGAGCCCTAATGGTGGTCTCCCTGGTCTGGGCTTCTCG
CCATGTTTGTGGCCACGATGGGCATGAAGTGCACGCGCTGTGGGGAGACGACAAAGTGAAGAAGGCCCG
TATAGCCATGGGTGGAGGCATAATTTTCATCGTGGCAGGTCTTGCCACCTTGGTAGCTTGCTCCTGGTAT
GGCCATCAGATTGTCACAGACTTTTATAACCCCTTGATCCCTACCAACATTAAGTATGAGTTTGGCCCTG
CCATCTTTATTGGCTGGCAGGGTCTGCCTAGTCATCCTGGGAGGTGCACTGCTCCTCTGTTCTGCTGC
TGGGAATGAGAGCAAGGCTGGGTACCGTGCACCCGCTCTTACCCTAAGTCCAACCTTCCAAGGAGTAT
GTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG200530 representing NM_001307
 Red=Cloning site Green=Tags(s)

MANSGLQLLGFSMALLGWVGLVACTAIPQWQMSYAGDNIITAQAMYKGLWMDCVTQSTGMMSCMYDSV
 LALSAALQATRALMVVSLVVLGFLAMFVATMGMKCTRCGGDDKVKKARIAMGGGIIFIVAGLATLVACSWY
 GHQIVTDFYNPLIPTNIKYEFGPAIFIGWAGSALVILGGALLSCSCPGNESKAGYRAPRSYPKSNSSKEY
 V

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001307

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:

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_001307.3](#), [NP_001298.2](#)

RefSeq Size: 1332 bp

RefSeq ORF: 636 bp

Locus ID: 1366

UniProt ID: [O95471](#)

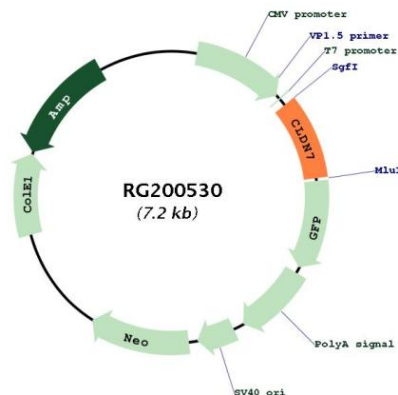
Cytogenetics: 17p13.1

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. Differential expression of this gene has been observed in different types of malignancies, including breast cancer, ovarian cancer, hepatocellular carcinomas, urinary tumors, prostate cancer, lung cancer, head and neck cancers, thyroid carcinomas, etc.. Alternatively spliced transcript variants encoding different isoforms have been found. [provided by RefSeq, May 2010]

Product images:



Circular map for RG200530