

Product datasheet for **RG225423**

Claudin 5 (CLDN5) (NM_001130861) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 5 (CLDN5) (NM_001130861) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Claudin 5
Synonyms:	AWAL; BEC1; CPETRL1; TMDVCF; TMVCF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG225423 representing NM_001130861 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGACCCGCGCACGGATTGGCTGCTTCGGGCGGGGGGCCGGGCCGGGGACAGAATCCGCCCCGAAC
CTTCAAAGAGGGTACCCCCGGCAGGAGCTGGCAGACCCAGGAGGTGCGACAGACCCGGGGCAAACGG
ACTGGGGCCAAGAGCCGGGAGCGCGGGCGCAAAGGCACCAAGGCCCGCCAGGGCGCCGCGCAGCACGGC
CTTGGGGGTTCTGCGGGCCTTCGGGTGCGCGTCTCGCCTCTAGCCATGGGGTCCGCAGCGTTGGAGATCC
TGGGCCTGGTGTGTGCCTGGTGGGCTGGGGGGGTCTGATCCTGGCGTGGGGCTGCCCATGTGGCAGGT
GACCGCCTTCCTGGACCAACATCGTGACGGCGCAGACCACCTGGAAGGGGCTGTGGATGTCGTGCGTG
GTGCAGAGCACCGGGCACATGCAGTGCAAAGTGTACGACTCGGTGCTGGCTCTGAGCACCGAGGTGCAGG
CGGCGCGGGCGCTCACCGTGAGCGCCGTGCTGCTGGCGTTCTGTTGCGCTCTTCGTGACCCCTGGCGGGCGC
GCAGTGCAACACCTGCGTGGCCCCGGGCCCGCCAAGGCGCGTGTGGCCCTCACGGGAGGCGTGTCTAC
CTGTTTTGCGGGTGTGGCGCTCGTGCCACTCTGCTGGTTCGCCAACATTGTCGTCCGCGAGTTTTACG
ACCGTCTGTGCCGTGTGCGAGAAGTACGAGCTGGGCGCAGCGCTGTACATCGGCTGGGCGGCCACCGC
GCTGCTCATGGTAGGCGGCTGCCTCTTGTGCTGCGGCGCCTGGGTCTGCACCGGCCGTCCGACCTCAGC
TTCCCCGTGAAGTACTCAGCGCCGCGGGGCCACGGCCACCGGCGACTACGACAAGAAGAACTACGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG225423 representing NM_001130861
 Red=Cloning site Green=Tags(s)

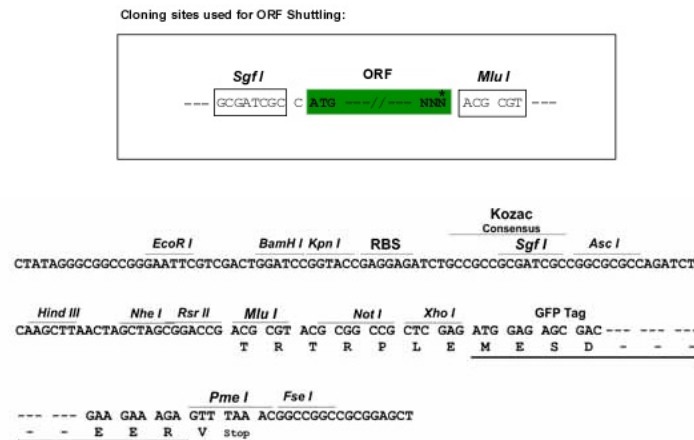
MTRARIGCFGPGRARGTESAPEPSKRVPGRSWQTQEVQRTRGANGLGPRAGSAGAKAPGPAQGAAQHG
 LGGSAGLRVRSPLAMGSAALEILGLVLCLVGWGLILACGLPMWQVTAFLDHNIIVTAQTTWKGLWMSCV
 VQSTGHMQCKVYDSVLALSTEVQAARALTVSAVLLAFVALFVTLAQAQCTTCVAPGPAKARVALTGGVLY
 LFCGLLALVPLCWFANIVVREFYDPSVPVSQKYELGAALYIGWAATALLMVGCLLCCGAWVCTGRPDLS
 FPKYSAPRRPTATGDYDKKNYV

TRTRPLE – GFP Tag – V

Chromatograms: https://cdn.origene.com/chromatograms/ja1758_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001130861

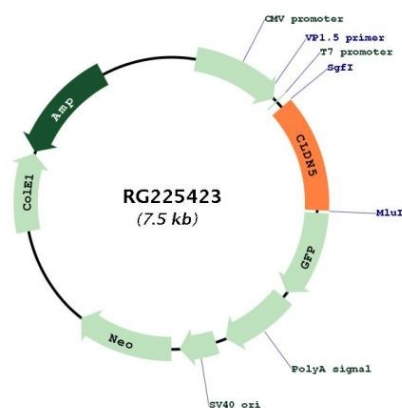
ORF Size: 909 bp

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:	<u>NM_001130861.1, NP_001124333.1</u>
RefSeq Size:	2332 bp
RefSeq ORF:	912 bp
Locus ID:	7122
UniProt ID:	<u>O00501</u>
Cytogenetics:	22q11.21
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. Mutations in this gene have been found in patients with velocardiofacial syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, May 2018]

Product images:



Circular map for RG225423