OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG231064

CLDN19 (NM_001185117) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLDN19 (NM_001185117) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CLDN19
Synonyms:	HOMG5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG231064 representing NM_001185117 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCAACTCAGGCCTCCAGCTCCTGGGCTACTTCTTGGCCCTGGGTGGCTGGGTGGGCATCATTGCTA
GCACAGCCCTGCCACAGTGGAAGCAGTCTTCCTACGCAGGCGACGCCATCATCACTGCCGTGGGCCTCTA
TGAAGGGCTCTGGATGTCCTGCGCCTCCCAGAGCACTGGGCAAGTGCAGTGCAAGCTCTACGACTCGCTG
CTCGCCCTGGACGGTCACATCCAATCAGCGCGGGCCCTGATGGTGGTGGCCGTGCTCCTGGGCTTCGTGG
CCATGGTCCTCAGCGTAGTTGGCATGAAGTGTACGCGGGTGGGAGACAGCAACCCCATTGCCAAGGGCCG
TGTTGCCATCGCCGGGGGAGCCCTCTTCATCCTGGCAGGTATGAATTTGGCCCAGCCCTGTTCGTGGGCT
GGGCCTCAGCTGGCCTGGCCGTGCTGGGCGGCTCCTTCCTCTGCTGCACATGCCCGGAGCCAGAGAGACC
CAACAGCAGCCCACAGCCCTATCGGCCTGGACCCTCTGCTGCTGCCCGAGAGTACGTCTGAGCTCCGCCT
GCCCTGGCCAGCCCCCCACCCAGTGGCCCCCTTGCCCAGCATCCAGCCAGCCTCGCAGCACCCTGGGCAG
GGCCACTGGGGCATAGGATGGGCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

View online »

Protein Sequence:

>RG231064 representing NM_001185117
Red=Cloning site Green=Tags(s)

MANSGLQLLGYFLALGGWVGIIASTALPQWKQSSYAGDAIITAVGLYEGLWMSCASQSTGQVQCKLYDSL
LALDGHIQSARALMVVAVLLGFVAMVLSVVGMKCTRVGDSNPIAKGRVAIAGGALFILAGMNLAQPCSWA
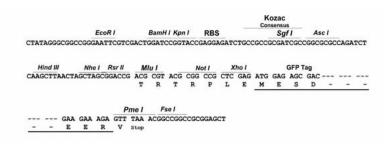GPQLAWPCWAAPSSAAHARSQRDPTAAHSPIGLDPLLLPESTSELRLPWPAPHPVAPLPSIQPASQHPGQ
GHWGIGWA

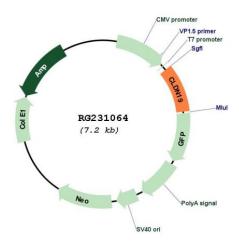TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

SgfI	ORF	MluI
--- GCGATCGC C	ATG ---//--- NNN	ACG CGT ---

Kozac Consensus

EcoR I   BamH I Kpn I   RBS   SgfI   Asc I
CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGCGCCAGATCT

Hind III   Nhe I Rsr II   Mlu I   Not I   Xho I   GFP Tag
CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---
                          T   R   T   R   P   L   E   M   E   S   D   -   -   -

Pme I   Fse I
--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT
          -   E   E   R   V Stop

Plasmid Map:

ACCN: NM_001185117

ORF Size: 654 bp

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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_001185117.1, NP_001172046.1
RefSeq Size:	3517 bp
RefSeq ORF:	657 bp
Locus ID:	149461
UniProt ID:	Q8N6F1
Cytogenetics:	1p34.2
Protein Families:	Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
Gene Summary:	The product of this gene belongs to the claudin family. It plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity. Defects in this gene are the cause of hypomagnesemia renal with ocular involvement (HOMGO). HOMGO is a progressive renal disease characterized by primary renal magnesium wasting with hypomagnesemia, hypercalciuria and nephrocalcinosis associated with severe ocular abnormalities such as bilateral chorioretinal scars, macular colobomata, significant myopia and nystagmus. Alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jun 2010]