

## Product datasheet for **RC208853**

### Claudin 8 (CLDN8) (NM\_199328) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 8 (CLDN8) (NM_199328) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Claudin 8
Synonyms:	HEL-S-79
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208853 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAACCCATGCCTTAGAAATCGCTGGGCTGTTTCTTGGTGGTGTGGAATGGTGGGCACAGTGGCTG  
TCACTGTCATGCCTCAGTGGAGAGTGTCCGGCTTCATTGAAAACAACATCGTGGTTTTGAAAACCTCTG  
GGAAGGACTGTGGATGAATTGCGTGAGGCAGGCTAACATCAGGATGCAGTGCAAATCTATGATCCCTG  
CTGGCTCTTTCTCCGGACCTACAGGCAGCCAGAGGACTGATGTGTGCTGCTTCCGTGATGCCTTCTTGG  
CTTTCATGATGGCCATCCTTGGCATGAAATGCACCAGGTGCACGGGGACAATGAGAAGGTGAAGGCTCA  
CATTCTGCTGACGGCTGGAATCATCTTCATCATCACGGGCATGGTGGTGCATCCCTGTGAGCTGGGTT  
GCCAATGCCATCATCAGAGATTTCTATAACTCAATAGTGAATGTTGCCAAAAACGTGAGCTTGGAGAAG  
CTCTCTACTTAGGATGGACCACGGCACTGGTGTGATTGTTGGAGGAGCTCTGTTCTGCTGCGTTTTTTG  
TTGCAACGAAAAGAGCAGTAGCTACAGATACTCGATACCTTCCCATCGCACAAACCAAAAAGTTATCAC  
ACCGAAAAGAAGTCACCGAGCGTCTACTCCAGAAGTCAGTATGTG

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC208853 protein sequence  
 Red=Cloning site Green=Tags(s)

MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNI VVFENFW EGLWMNCVRQANIRMQCKIYDSL  
 LALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILLTAGIIFIITGMVVLIPVSWV  
 ANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGALFCCVFCNEKSSSYRYSIPSHRTTQKSYH  
 TGKKSPSVYSRSQYV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6550\\_e04.zip](https://cdn.origene.com/chromatograms/mk6550_e04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_199328

**ORF Size:** 675 bp

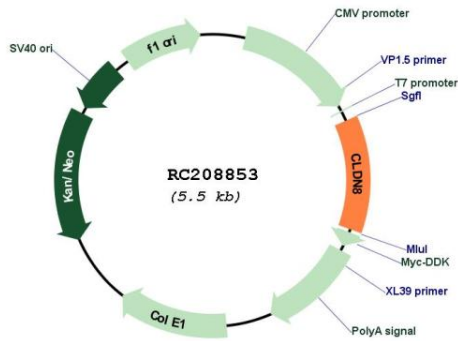
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

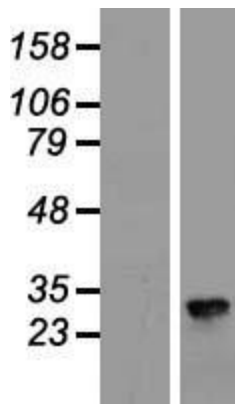
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_199328.3</a>
<b>RefSeq Size:</b>	2147 bp
<b>RefSeq ORF:</b>	678 bp
<b>Locus ID:</b>	9073
<b>UniProt ID:</b>	<a href="#">P56748</a>
<b>Cytogenetics:</b>	21q22.11
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
<b>MW:</b>	24.8 kDa
<b>Gene Summary:</b>	<p>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 protein plays important roles in the paracellular cation barrier of the distal renal tubule, and in the paracellular barrier to prevent sodium back-leakage in distal colon. Differential expression of this gene has been observed in colorectal carcinoma and renal cell tumors, and along with claudin-7, is an immunohistochemical marker for the differential diagnosis of chromophobe renal cell carcinoma and renal oncocytoma.[provided by RefSeq, May 2010]</p>

Product images:



Circular map for RC208853



Western blot validation of overexpression lysate (Cat# [LY404623]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208853 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).