

Product datasheet for RG235441

OriGene Technologies, Inc.

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Chloride Channel 5 (CLCN5) (NM_001272102) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Chloride Channel 5 (CLCN5) (NM_001272102) Human Tagged ORF Clone

Tag: TurboGFP Symbol: CLCN5

Synonyms: CIC-5; CLC5; CLCK2; DENT1; DENTS; hCIC-K2; NPHL1; NPHL2; XLRH; XRN

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG235441 representing NM_001272102.

Sequence: Blue=ORF Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCCATGTGGCAGGGTGCCATGGATAACAGAGGCTTTCAGCAGGGGAGTTTTAGTAGCTTCCAGAAC AGCTCCAGTGATGAAGACCTGATGGACATTCCAGCAACCGCTATGGATTTCTCCATGAGAGATGATGTT

 ${\tt CCTCCCTTAGACCGAGAAGTAGGAGGTATCATTATTGGTGATAATTTATCT}$

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence: >Peptide sequence encoded by RG235441

Blue=ORF Red=Cloning site Green=Tag(s)

MAMWQGAMDNRGFQQGSFSSFQNSSSDEDLMDIPATAMDFSMRDDVPPLDREVGGIIIGDDNLS

TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA

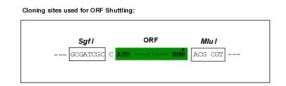
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

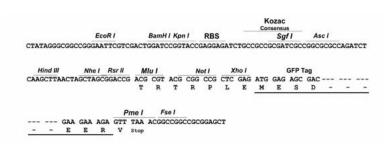
Restriction Sites: Sgfl-Mlul



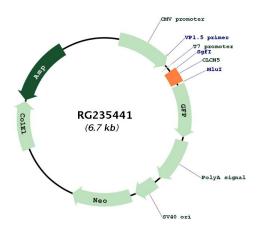


Cloning Scheme:





Plasmid Map:



ACCN: NM_001272102

ORF Size: 192 bp



Chloride Channel 5 (CLCN5) (NM_001272102) Human Tagged ORF Clone - RG235441

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).

RefSeq: <u>NM 001272102.2</u>

RefSeq Size: 640 bp
RefSeq ORF: 195 bp
Locus ID: 1184
Cytogenetics: Xp11.23

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

MW: 7.5 kDa

Gene Summary: This gene encodes a member of the CIC family of chloride ion channels and ion transporters.

The encoded protein is primarily localized to endosomal membranes and may function to facilitate albumin uptake by the renal proximal tubule. Mutations in this gene have been

found in Dent disease and renal tubular disorders complicated by nephrolithiasis.

Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq,

Jan 2013]