

Product datasheet for RC205295

TJP2 (NM_004817) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TJP2 (NM_004817) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TJP2
Synonyms:	C9DUPq21.11; DFNA51; DUP9q21.11; FHCA1; PFIC4; X104; ZO2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205295 representing NM_004817 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGGTGCAGGAGACCGCGGGTTCCACCCGGCGGGAGCTGTCAGGTTGGCTCCGCGCCCCAGGCA
TGGAAAGAGCTGATATGGGAACAGTACACTGTGACCCTACAAAAGGATTCCAAAAGAGGATTTGGAATTGC
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GCCCCGAGAACTTTTCTTCGTCCTAGTCCTGAAGATGAAGCAATATATGGCCCTAATACCAAAATGGTAA
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ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205295 representing NM_004817
 Red=Cloning site Green=Tags(s)

MPVVRGDRGFPPRELSGWL RAPGMEELIWEQYTVTLQKDSKRGFGIAVSGGRDNPHFENGETSIVISDVL
 PGGPADGLLQENDRVVMVNGTPMEDVLHSFAVQQLRKSGKVAII VVKRPRKVQVAALQASPLDQDDRAF
 EVMDEFDGRSFRSGYSERSRLNSHGGRSRSWEDSPERGRPHERARSRERDLSRDRSRGRSLERGLDQDHA
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 GPRSRSRREHPSRSPSPEPRGRPGIGVLLMKSRAEEYGLRLGSQIFVKEMTRTGLATKGNLHEGDII
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 TGVVRLNTVRQIIEQDKHALLDVTPKAVDLLNYTQWFPVIVIFFNPDSRQGVKTMQRNLNPTSNKSSRKL
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 YLSCDSRLISDFEDTDGEGGAYTDNELDEPAEEPLVSSI TRSSEP VQHEESIRKPSPEPRAQMRAASSD
 QLRDNSPPPAFKPEPPKAKTQNKEESYDFSKSYEYKSNPSAVAGNETPGASTKGYPPPVAAKPTFGRSIL
 KPSTPIPPQEGEEVGESSEEQDNAPKSVLGVKVI FEKMDH KARLQRMQELQEAQNARIEIAQKHPDIYAV
 PIKTHKPDGTPQHTSSRPPEPQKAPSRPYQDTRGSYGSDAEEEEYRQQLSEHSKRGYGGQSARYRDEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2569_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004817

ORF Size: 3570 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:

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_004817.4](#)

RefSeq Size: 4618 bp

RefSeq ORF: 3573 bp

Locus ID: 9414

UniProt ID: [Q9UDY2](#)

Cytogenetics: 9q21.11

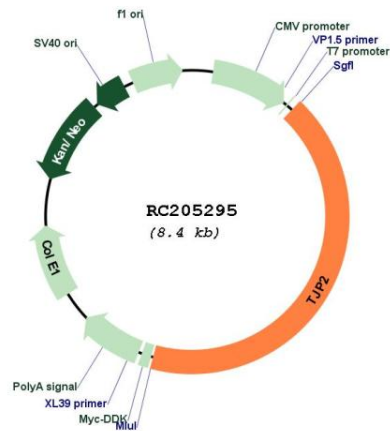
Domains: SH3, PDZ, Guanylate_kin, GuKc

Protein Pathways: Tight junction, Vibrio cholerae infection

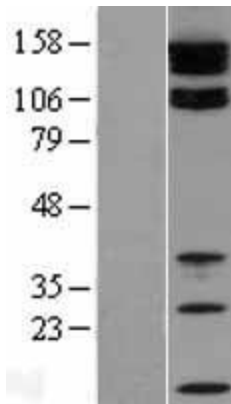
MW: 133.8 kDa

Gene Summary: This gene encodes a zonula occluden that is a member of the membrane-associated guanylate kinase homolog family. The encoded protein functions as a component of the tight junction barrier in epithelial and endothelial cells and is necessary for proper assembly of tight junctions. Mutations in this gene have been identified in patients with hypercholanemia, and genomic duplication of a 270 kb region including this gene causes autosomal dominant deafness-51. Alternatively spliced transcripts encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]

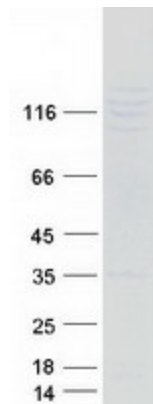
Product images:



Circular map for RC205295



Western blot validation of overexpression lysate (Cat# [LY401513]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205295 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TJP2 protein (Cat# [TP305295]). The protein was produced from HEK293T cells transfected with TJP2 cDNA clone (Cat# RC205295) using MegaTran 2.0 (Cat# [TT210002]).