

Product datasheet for **RG230621**

TJP2 (NM_001170414) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TJP2 (NM_001170414) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TJP2
Synonyms:	C9DUPq21.11; DFNA51; DUP9q21.11; FHCA1; PFIC4; X104; ZO2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230621 representing NM_001170414 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGAGCTGATATGGGAACAGTACACTGTGACCCTACAAAAGGATCCAAAAGAGGATTTGGAATTG
CAGTGTCCGGAGGCAGAGACAACCCCACTTTGAAAATGGAGAAACGTCAATTGTCATTTCTGATGTGCT
CCCGGGTGGGCTGCTGATGGGCTGCTCAAGAAAATGACAGAGTGGTCATGGTCAATGGCACCCCATG
GAGGATGTGCTTCATTCTGTTGAGTTCAGCAGCTCAGAAAAAGTGGGAAGGTCGCTGCTATTGTGGTCA
AGAGGCCCGGAAGGTCCAGGTGGCCGCACTTCAGGCCAGCCCTCCCTGGATCAGGATGACCGGGCTTT
TGAGGTGATGGACGAGTTTGATGGCAGAAGTTCCGGAGTGGCTACAGCGAGAGGAGCCGGCTGAACAGC
CATGGGGGGCGCAGCCGAGCTGGGAGGACAGCCCGAAAGGGGGCGTCCCATGAGCGGGCCCGGAGCC
GGGAGCGGGACCTCAGCCGGGACCGGAGCCGTGGCCGGAGCCTGGAGCGGGGCTGGACCAAGACCATGC
GCGCACCCGAGACCGCAGCCGTGGCCGGAGCCTGGAGCGGGGCTGGACCAGACTTTGGGCCATCCCGG
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GGGCCATCGGGTCTCTGATGAAAAGCAGAGCGAAGCAAGAGTATGGTCTCCGGCTTGGGAGTCAGA
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AGAGGAAAACACAGCTAGTGGTGTGAGAGACAGCCAGCAGACCCTCATCAACATCCCGTCATTAATG
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AGGTTCAAGAAGGGAGACAGCGTGGGCCTCCGGTTGGCTGGTGGCAATGATGTCGGGATATTTGTTGCTG
GCATTCAGAAGGGACCTCGGCGGAGCAGGAGGGCCTTCAAGAAGGAGACCAGATTCTGAAGGTGAACAC
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CAGGATACCAGAGGAAGTTATGGCAGTGTGCCGAGGAGGAGTACCGCCAGCAGCTGCAGAACACT
CCAAGCGCGTTACTATGGCCAGTCTGCCGATACCGGACACAGAATTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG230621 representing NM_001170414
Red=Cloning site Green=Tags(s)

MEELIWEQYTVTLQKDSKRGFGIAVSGGRDNPHFENGETSIVISDVLPGGPADGLLQENDRVVMVNGTPM
EDVLHSFAVQQLRKSGKVAIVVVRPRKQVAALQASPLDQDDRAFEVMEFDGRSFRSGYSERSRLNS
HGGRSRWEDSPERGRPHERARSRERDL SRDRSRGSLERGLDQDHARTDRSRGSLERGLDHDGFSR
DRDRDRSRGRSIDQDYERAYHRAYPDYERAYSPEYRRGARHDARSRGRSRSREHPSRSRSPPEPRGRP
GPIGVLLMKSRANEEYGLRLGSQIFVKEMTRTGLATKDGNLHEGDIILKINGTVTENMSLTDARKLIEKS
RGKLQLVVL RDSQQLINIPSLNDSSEIEDISEIESNRSFSPEERRHQYSDYDYHSSSEKLKERPSSRE
DTPSRLSRMGATPTPFKSTGDIAGTVVPETNKEPRYQEDPPAPQPKAAPRTFLRPSPEDEAIYGPNTKMV
RFKKGDSVGLRLAGGNDVGFVAGIQEGTSAEQEGLQEGDQILKVNTQDFRGLVREDAVL YLLEIPKGM
VTILAQSRADVYRDILACGRGDSFFIRSHFECEKETPQSLAFTRGEVFRVVDL YDGKLGWLAVRIGNE
LEKGLIPNKSRAEQMASVQNAQRDNAGDRADFWRMRGQSRGVKKNLRKSREDLTAVVSVSTKFPAYERV
LREAGFKRPVVLFGPIADIAMEKLANELPDWFQTAKTEPKDAGSEKSTGVVRLNTRVRIIEQDKHALLDV
TPKAVDLLNYTQWFPIVIFFPNPSRQGVKTMQRNLNPTSNKSSRKLFDQANKLKKTCAHLFTATINLSA
NDSWFGSLKDTIQHQQGEAVVWSEGKMEGMDDDPEDRMSYL TAMGADYLSCD SRLISDFEDTDGEGGAYT
DNELDEPAEEPLVSSITRSSEPVQHEEIEIAQKHPDIYAVPIKTHKPDGTPQHTSSRPPEPQKAPSRPY
QDTRGSYGSDAEEEEYRQLSEHSKRGYGGQSARYRDEL

TRTRPLE - GFP Tag - V

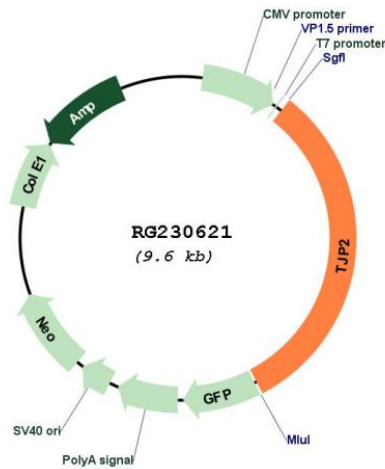
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001170414

ORF Size: 3060 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).
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_001170414.2</u> , <u>NP_001163885.1</u>
RefSeq Size:	4129 bp
RefSeq ORF:	3063 bp
Locus ID:	9414
Cytogenetics:	9q21.11
Protein Pathways:	Tight junction, Vibrio cholerae infection
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]