

Product datasheet for **RG213399**

Zonula occludens protein 3 (TJP3) (NM_014428) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Zonula occludens protein 3 (TJP3) (NM_014428) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TJP3
Synonyms:	ZO-3; ZO3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG213399 representing NM_014428
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAACCTGTGTGGCCTCATGCCATCTTCCCCGCTCCCCTCGACCAGGTGGCTGACATGGAGGAGCTGA
 CCATCTGGGAACAGCACACGGCCACACTGTCCAAGGACCCCGCCGGGGCTTTGGCATTGCGATCTCTGG
 AGGCCGAGACCGCCCGTGGATCCATGGTTGTATCTGACGTGGTACCTGGAGGGCCGGCGAGGGCAGG
 CTACAGACAGGCGACCACATCGTCATGGTGAACGGGGTTTCCATGGAGAATGCCACCTCCGCGTTTGCCA
 TTCAGATACTCAAGACCTGCACCAAGATGGCCAACATCACAGTGAACCGTCCCGGAGGATCCACCTGCC
 CGCCACCAAGGCCAGCCCTCCAGCCAGGGCGCCAGGACTCGGATGAAGACGATGGGCCCCAGCGGGTG
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 ATGATGCGGAGTCTCCGATGAAGACGGCTATGACTGGGGTCCGGCCACTGACCTG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG213399 representing NM_014428
 Red=Cloning site Green=Tags(s)

MNL CGLMP IFFAPLDQVADMEELTIWEQHTATLSKDPRRFGIAISGGRDRPGGSMVSDVVPGGPAEGR
 LQTGDHIVMNGVSMENATSAFAIQILKCTKMANITVKRPRRIHL PATKASPSSPGRQDSEDDGPQRV
 EEVDQGRGYDGDSSSGSRSWDERSRRRPRGRRGRAGSHGRRSPGGGSEANGLALVSGFKRLPRQDVQMK
 PVKSVLVKRRDSEEFVKLGSQIFIKHITDSGLAARHRLQEGDLILQINGVSSQNL SLNDRRLIEKSE
 GKLSLLVLRDRGQFLVNI PPAVSDSDSSPLEEGVTMADEMSPADI SDLASELSQAPPSHIPPPRHAQ
 RSP EASQT DSPVES PRLRRESSVDSRTISEPDEQRSELPRESSYDIYRVPSSQSMEDRGYSPDTRVVRFL
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 VTQRKQDIFWKMVQSRVGD SFYIRTHFELEPSPSGLGF TRGDVFHVLDTLHPGPGQSHARGHWA VRM
 GRDLREQERGIIPNQSRAEQLASLEAAQRAVGVP GSSAGSNARAEFWRLRGLRRGAKKTTQRSRELD SA
 LTRQGRYPYERVV LREASFKRPVVILGPVADIAMQKL TAEMPDQFEIAETVSRTDPSKIIKLDTVRVI
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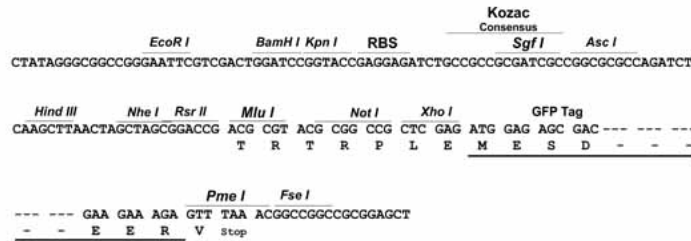
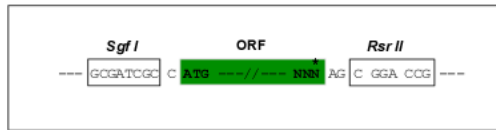
SGP TRTRRLE - GFP Tag - V

Restriction Sites:

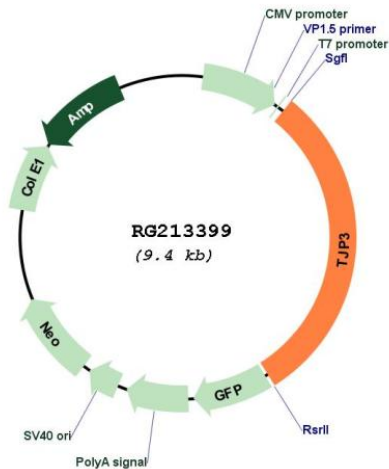
SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_014428

ORF Size: 2855 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:

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_014428.1](#), [NP_055243.1](#)

RefSeq Size: 2859 bp

RefSeq ORF: 2858 bp

Locus ID: 27134

Cytogenetics: 19p13.3

Protein Pathways: Tight junction

Gene Summary:

The protein encoded by this gene is a member of the membrane-associated guanylate kinase-like (MAGUK) protein family which is characterized by members having multiple PDZ domains, a single SH3 domain, and a single guanylate kinase-like (GUK)-domain. In addition, members of the zonula occludens protein subfamily have an acidic domain, a basic arginine-rich region, and a proline-rich domain. The protein encoded by this gene plays a role in the linkage between the actin cytoskeleton and tight-junctions and also sequesters cyclin D1 at tight junctions during mitosis. Alternative splicing results in multiple transcript variants encoding distinct isoforms. This gene has a partial pseudogene on chromosome 1. [provided by RefSeq, May 2012]