

Product datasheet for **MG227561**

Tjp1 (NM_009386) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tjp1 (NM_009386) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tjp1
Synonyms:	ZO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227561 representing NM_009386 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGCCAGGGCCGCGCCGCTAAGAGCACAGCAATGGAGGAAACAGCTATATGGGAACAGCACACAG
TGACGCTTCACAGGGCTCCTGGTTTGGATTTGGAATTGCAATCTCTGGTGAAGAGATAATCCTCATT
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GTACTGTGACAGAAAATATGTCATTGACAGATGCAAAAACACTGATAGAAAGGTCTAAAGGCAAGTTAAA
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CCTAAAGGTGAAGAAGTGACCATACTGGCTCAGAAGAAGAAGGACGTTTATCGCCGATTGTAGAATCAG
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TCCTGAAGCCCGTGGAGCTACGCTTGCCACACTGTGACCCTAAAACCTGGCAAAACAAGTGTCTTCTCTGG
AGATCCGAATTACCTTGTGGAGCCAACCTGTGTTTCTGTCCTGATTGACCACTTT

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227561 representing NM_009386
Red=Cloning site Green=Tags(s)

MSARAAAAKSTAMEETAWEQHTVTLHRAPGFGFGIAISGGRDNPHFQSGETSIVISDVLKGGPAEQQLQ
ENDRVAMVNGVSMNDNVEHAFVQQLRKSGKNAKITIRKKKVVQIPVSHDPPEVSDNEDDSYDEEVHDP
AGRGALANRRSEKSWARDRSASRERSLSPRSDRRSVASSQPAKPTKVTLVKSrkNEEYGLRLASHIFVKE
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SMKLVKFRKGDVGLRLAGGNDVGFVAGVLEDSPAAKEGLEEGDQILRVNNVDF TNI IREEAVLFLDL
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PAYERVVLRAGFLRPVTIFGPIADVAREKLAREEPDIYQIAKSEPRDAGTDHRSSGIIRLHTIKQIIDQ
DKHALLDVT PNAVDRLNYAQWYPIVVFLNPD SKQGVK TMRMLCPE SRKSARKL YERSHKL RKNHHLFT
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SDYEDTDEGGAYTDQELDETLNDEVTGTPPESAITRSSEPVREDSGGMHENQTYPPYSPQAQPAIHR
DSPGLKPASQQKAEASSPVYLSPETTPASSASAVNHNVSVTNVSL EEPAPAPPTSHASQPGCLGAPSAE
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PQVKPPEDIVRSNHYPDEEDEEYRKQLSYFDRRSFESKPSAHL PAGHHSEPAKPVHSQSQPNFSSYSSK
GKPETDAVDRSFSEKRYDPAQATPPPPPLPSQYSQPAPPLSSSSLHIHSGAQQEGNSVSLDFQNSYMSK
PDPPPSQSKPATFRPPTREDPPQTFYPQKSF PDKAPVNGAEQTQKITIPVYNRF TPKPYTSARPFERKF
ESPKFNHLLPSETVHKPELSSKTPTSPKTLMAHSSTQPPEFDSGVETFSVHTDKPKYQMNISTMPKA
VPVSPSAVEEDEDGHTVVATARGIFNSNGGVLSSIETGVSIIIPQGAIPEGIEQEIYFKVCRDINSILP
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TRTRPLE - GFP Tag - V

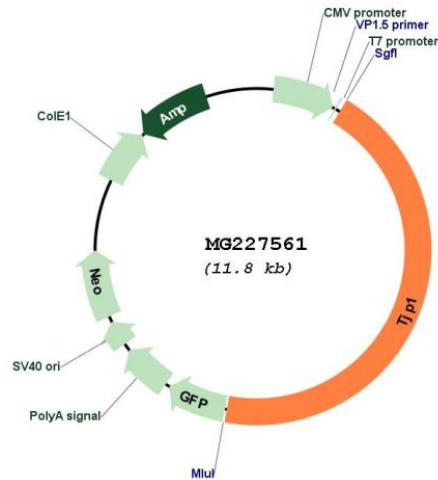
Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_009386

ORF Size: 5235 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_009386.2](#), [NP_033412.2](#)

RefSeq Size: 7054 bp

RefSeq ORF: 5238 bp

Locus ID: 21872

UniProt ID: [P39447](#)

Cytogenetics: 7 35.02 cM

Gene Summary:

Tjp1, Tjp2, and Tjp3 are closely related scaffolding proteins that link tight junction (TJ) transmembrane proteins such as claudins, junctional adhesion molecules, and occludin to the actin cytoskeleton (By similarity). The tight junction acts to limit movement of substances through the paracellular space and as a boundary between the compositionally distinct apical and basolateral plasma membrane domains of epithelial and endothelial cells. Necessary for lumenogenesis, and particularly efficient epithelial polarization and barrier formation (By similarity). Plays a role in the regulation of cell migration by targeting Cdc42bpb to the leading edge of migrating cells (By similarity). Plays an important role in podosome formation and associated function, thus regulating cell adhesion and matrix remodeling (By similarity). With Tjp2 and Tjp3, participates to the junctional retention and stability of the transcription factor Dbpa, but is not involved in its shuttling to the nucleus (By similarity).[UniProtKB/Swiss-Prot Function]