

## Product datasheet for MR226867

### Tjp1 (NM\_001163574) Mouse Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Tjp1 (NM\_001163574) Mouse Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Tjp1  
 Synonyms: ZO1  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 Cell Selection: Neomycin  
 ORF Nucleotide Sequence: >MR226867 representing NM\_001163574  
 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>MR226867 representing NM\_001163574  
Red=Cloning site Green=Tags(s)

MSARAAAAKSTAMEETAWEQHTVTLHRAPGFGFGIAISGGRDNPHFQSGETSIVISDVLKGGPAEQQLQ  
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AGRGALANRRSEKSWARDRSASRERSLSRSDRRSVASSQPAKPTKVTLVKSARKNEEYGLRLASHIFVKE  
ISQDLSLAARDGNIQEGDVVLKINGVTENMSL TDAKTL IERSKGLKMMVVQORDERATLLNVPDLSDSIHS  
ANASERDDISEIQSLASDHSGRSHDRPPRRSQSRSPDQRSEPSDHSTQSPQQPSNGLSRSEERMSKPG  
AISTPVKHVDDHPPKAVEEVTVEKNEKQPTLPEPKPVYAQVGGQPDVLPVSPSDGALPNSAHEDGILRP  
SMKLVKFRKGDVGLRLAGGNDVGFVAVGLEDSAAKEGLEEGDQILRVNNDVF TNI IREEAVLFLDL  
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PSETVHKPELSSKTPTSPKTLMAHSSSTQPEFDSGVETFSVHTDKPKYQMNISTMPKAVPVSPSAVEE  
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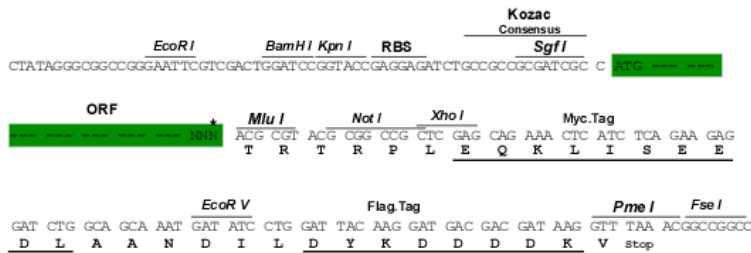
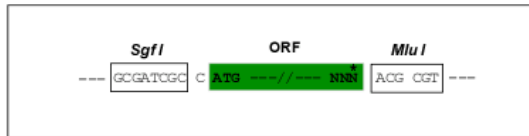
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

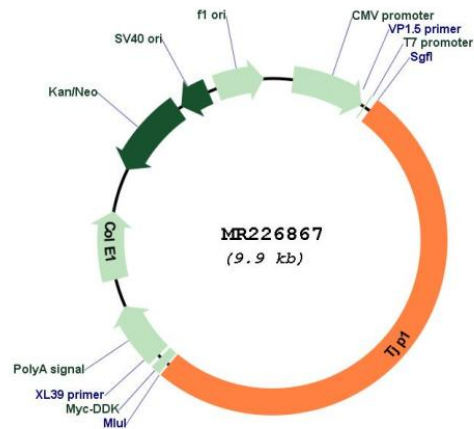
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_001163574

ORF Size: 5055 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001163574.1, NP_001157046.1</u>
<b>RefSeq Size:</b>	6891 bp
<b>RefSeq ORF:</b>	5058 bp
<b>Locus ID:</b>	21872
<b>Cytogenetics:</b>	7 35.02 cM
<b>MW:</b>	189.3 kDa
<b>Gene Summary:</b>	Tjp1, TjpP2, 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 Tjpp3, 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]