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# Product datasheet for RC240215

## TJP1 (NM_001301025) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | TJP1 (NM_001301025) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | TJP1 |
| **Synonyms:** | ZO-1 |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |
| **Cell Selection:** | Neomycin |
| **ORF Nucleotide Sequence:** | >RC240215 representing NM_001301025<br>Red=Cloning site Blue=ORF Green=Tags(s)<br><br>TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC<br>GCCGCGATCGCC<br><br>ATGAAGTACCAGAAATACCTGACGGTGCTGCAGATGGCCATCGGCGTCACCCCCTCCAACCGCGGCAGCC<br>TCCTGCCGCTCAAGAGGAAGCTGTGGGTAACGCCATCCTCTGAAAATCCTAATGGTGCTACTTCTAGTGT<br>CAGCCAAGGAAAACCCTCTTTAAGACGAATTAAAGGGAGATTACACAGAAGCAAAAGCCTTGATAGCATG<br>GATTTCTGTGAGCTCACTAGCACAGCAATGGAGGAAACAGCTATATGGGAACAACATACAGTGACGCTTC<br>ACAGGGCTCCTGGATTTGGATTTGGAATTGCAATATCTGGTGGACGAGATAATCCTCATTTTCAGAGTGG<br>GGAAACGTCAATAGTGATTTCAGATGTGCTGAAAGGAGGACCAGCTGAAGGACAGCTACAGGAAAATGAC<br>CGAGTTGCAATGGTTAACGGAGTTTCAATGGATAATGTTGAACATGCTTTTGCTGTTCAGCAACTAAGGA<br>AAAGTGGGAAAAATGCAAAAATTACAATTAGAAGGAAGAAGAAAGTTCAAATACCAGTAAGTCGTCCTGA<br>TCCTGAACCAGTATCTGATAATGAAGAAGATAGTTATGATGAGGAAATACATGATCCAAGAAGTGGCCGG<br>AGTGGTGTGGTTAACAGAAGGAGTGAGAAGATTTGGCCGAGGGATAGAAGTGCAAGTAGAGAGAGGAGCT<br>TGTCCCCGCGGTCAGACAGGCGGTCAGTGGCTTCCAGCCAGCCTGCTAAACCTACTAAAGTCACACTGGT<br>GAAATCCCGGAAAAATGAAGAATATGGTCTTCGATTGGCAAGCCATATATTTGTTAAGGAAATTTCACAA<br>GATAGTTTGGCAGCAAGAGATGGCAATATTCAAGAAGGTGATGTTGTATTGAAGATAAATGGTACTGTGA<br>CAGAAAATATGTCATTGACAGATGCAAAGACATTGATAGAAAGGTCTAAAGGCAAATTAAAAATGGTAGT<br>TCAAAGAGATGAACGGGCTACGCTATTGAATGTCCCTGATCTTTCTGACAGCATCCACTCTGCTAATGCC<br>TCTGAGAGAGACGACATTTCAGAAATTCAGTCACTGGCATCAGATCATTCTGGTCGATCACACGATAGGC<br>CTCCCCGCCGCAGCCGGTCACGATCTCCTGACCAGCGGTCAGAGCCTTCTGATCATTCCAGGCACTCGCC<br>GCAGCAGCCAAGCAATGGCAGTCTCCGGAGTAGAGATGAAGAGAGAATTTCTAAACCTGGGGCTGTCTCA<br>ACTCCTGTAAAGCATGCTGATGATCACACACCTAAAACAGTGGAAGAAGTTACAGTTGAAAGAAATGAGA<br>AACAAACACCTTCTCTTCCAGAACCAAAGCCTGTGTATGCCCAAGTTGGGCAACCAGATGTGGATTTACC<br>TGTCAGTCCATCTGATGGTGTCCTACCTAATTCAACTCATGAAGATGGGATTCTTCGGCCCAGCATGAAA<br>TTGGTAAAATTCAGAAAAGGAGATAGTGTGGGTTTGCGGCTGGCTGGTGGAAATGATGTTGGAATATTTG |



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**Protein Sequence:**

>RC240215 representing NM_001301025
Red=Cloning site Green=Tags(s)

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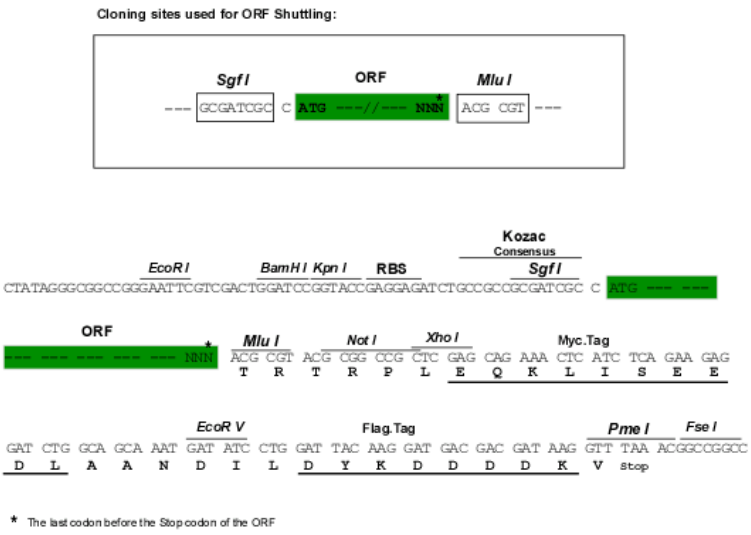
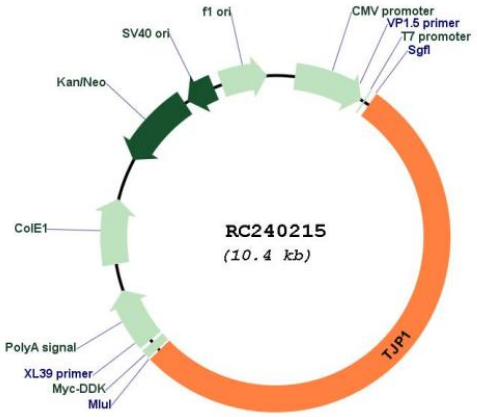
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**Plasmid Map:**




**ACCN:** NM_001301025

**ORF Size:** 5505 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001301025.1, NP_001287954.1 |
| **RefSeq Size:** | 7795 bp |
| **RefSeq ORF:** | 5586 bp |
| **Locus ID:** | 7082 |
| **Cytogenetics:** | 15q13.1 |
| **Protein Families:** | Druggable Genome |
| **Protein Pathways:** | Adherens junction, Epithelial cell signaling in Helicobacter pylori infection, Gap junction, Tight junction, Vibrio cholerae infection |
| **MW:** | 205.5 kDa |
| **Gene Summary:** | This gene encodes a member of the membrane-associated guanylate kinase (MAGUK) family of proteins, and acts as a tight junction adaptor protein that also regulates adherens junctions. Tight junctions regulate the movement of ions and macromolecules between endothelial and epithelial cells. The multidomain structure of this scaffold protein, including a postsynaptic density 95/disc-large/zona occludens (PDZ) domain, a Src homology (SH3) domain, a guanylate kinase (GuK) domain and unique (U) motifs all help to co-ordinate binding of transmembrane proteins, cytosolic proteins, and F-actin, which are required for tight junction function. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2017] |