# RPC262Ra01 100 $\mu \mathrm{g}$ <br> Recombinant Tight Junction Protein 1 (TJP1) <br> Organism Species: Rattus norvegicus (Rat) <br> Instruction manual <br> <br> FOR IN VITRO USE AND RESEARCH USE ONLY <br> <br> FOR IN VITRO USE AND RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES 

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10th Edition (Revised in Jan, 2014)

## [ PROPERTIES]

Residues: Gly23~Asp502
Tags: Two N-terminal Tags, His-tag and T7-tag
Accession: F1M4A0
Host: E. coli
Subcellular Location: Cell membrane. Peripheral membrane protein. Cytoplasmic side. Cell junction, tight junction, gap junction.
Purity: >95\%
Endotoxin Level: <1.0EU per $1 \mu \mathrm{~g}$ (determined by the LAL method).


Formulation: Supplied as lyophilized form in PBS, pH7.4, containing 5\% trehalose, $0.01 \%$ sarcosyl.
Predicted isoelectric point: 6.2
Predicted Molecular Mass: 56.4 kDa
Accurate Molecular Mass: 70kDa as determined by SDS-PAGE reducing conditions.
Applications: SDS-PAGE; WB; ELISA; IP.
(May be suitable for use in other assays to be determined by the end user.)
Note: The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

## [ USAGE ]

Reconstitute in sterile PBS, pH7.2-pH7.4.

## [ STORAGE AND STABILITY ]

## Storage: Avoid repeated freeze/thaw cycles.

Store at $2-8^{\circ} \mathrm{C}$ for one month.
Aliquot and store at $-80^{\circ} \mathrm{C}$ for 12 months.
Stability Test: The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at $37^{\circ} \mathrm{C}$ for 48 h , and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than $5 \%$ within the expiration date under appropriate storage condition.

## [ SEQUENCES ]

The sequence of the target protein is listed below.
GIAISGGR DNPHFQSGET SIVISDVLKG GPAEGQLQEN DRVAMVNGVS MDNVEHAFAV QQLRKSGKNA KITIRRKKKV QIPVSHPDPD PVSDNEDDSY DEDVHDPRSG RGALANRRGE KSWARDRSAS RDRSLSPRSD RRSVASSQPA KPTKVTLVKS RKNEEYGLRL ASHIFVKEIS QDSLAARDGN IQEGDVVLKI NGTVTENMSL TDAKTLIERS KGKLKMVVQR DERATLLNVP DLSDSIHSAN ASERDDISEI QSLASDHSVR SHDRPPRRSQ SRSPDQRSEP SDHSTQSPQQ PSNGSLRSRE EERMSKPGAV STPVKHVDDH TPKAVEEVTV EKHEKQTPTL PEPKPVYAQV GQPDVDLPVS PSDGVLPNST HEDGILRPSM KLVKFRKGDS VGLRLAGGND VGIFVAGVLE DSPAAKEGLE EGDQILRVNN VDFTNIIREE AVLFLLDLPK GEEVTILAQK KKDVYRRIVE SD

