

# Datasheet for ABIN3076293

# TJP3 Protein (AA 1-919) (Strep Tag)



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Quantity:	250 μg
Target:	TJP3
Protein Characteristics:	AA 1-919
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TJP3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details		
Brand:	AliCE®	
Sequence:	MEELTIWEQH TATLSKDPRR GFGIAISGGR DRPGGSMVVS DVVPGGPAEG RLQTGDHIVM	
	VNGVSMENAT SAFAIQILKT CTKMANITVK RPRRIHLPAT KASPSSPGRQ DSDEDDGPQR	
	VEEVDQGRGY DGDSSSGSGR SWDERSRRPR PGRRGRAGSH GRRSPGGGSE ANGLALVSGF	
	KRLPRQDVQM KPVKSVLVKR RDSEEFGVKL GSQIFIKHIT DSGLAARHRG LQEGDLILQI	
	NGVSSQNLSL NDTRRLIEKS EGKLSLLVLR DRGQFLVNIP PAVSDSDSSP LEDISDLASE	
	LSQAPPSHIP PPPRHAQRSP EASQTDSPVE SPRLRRESSV DSRTISEPDE QRSELPRESS	
	YDIYRVPSSQ SMEDRGYSPD TRVVRFLKGK SIGLRLAGGN DVGIFVSGVQ AGSPADGQGI	
	QEGDQILQVN DVPFQNLTRE EAVQFLLGLP PGEEMELVTQ RKQDIFWKMV QSRVGDSFYI	
	RTHFELEPSP PSGLGFTRGD VFHVLDTLHP GPGQSHARGG HWLAVRMGRD LREQERGIIP	
	NQSRAEQLAS LEAAQRAVGV GPGSSAGSNA RAEFWRLRGL RRGAKKTTQR SREDLSALTR	
	QGRYPPYERV VLREASFKRP VVILGPVADI AMQKLTAEMP DQFEIAETVS RTDSPSKIIK	

LDTVRVIAEK DKHALLDVTP SAIERLNYVQ YYPIVVFFIP ESRPALKALR QWLAPASRRS
TRRLYAQAQK LRKHSSHLFT ATIPLNGTSD TWYQELKAII REQQTRPIWT AEDQLDGSLE
DNLDLPHHGL ADSSADLSCD SRVNSDYETD GEGGAYTDGE GYTDGEGGPY TDVDDEPPAP
ALARSSEPVQ ADESQSPRDR GRISAHQGAQ VDSRHPQGQW RQDSMRTYER EALKKKFMRV
HDAESSDEDG YDWGPATDL

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

#### Characteristics:

### Key Benefits:

- Made in Germany from design to production by highly experienced protein experts.
- · Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for
  protein production are removed, leaving only the protein production machinery and the
  mitochondria to drive the reaction. During our lysate completion steps, the additional
  components needed for protein production (amino acids, cofactors, etc.) are added to
  produce something that functions like a cell, but without the constraints of a living system all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- · We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).	
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).	
Grade:	custom-made	
Target Details		
Target:	TJP3	
Alternative Name:	TJP3 (TJP3 Products)	
Background:	Tight junction protein ZO-3 (Tight junction protein 3) (Zona occludens protein 3) (Zonula occludens protein 3),FUNCTION: 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 (PubMed:16129888). 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. Binds and recruits PATJ to tight junctions where it connects and stabilizes apical and lateral components of tight junctions (PubMed:16129888). Promotes cell-cycle progression through the sequestration of cyclin D1 (CCND1) at tight junctions during mitosis which prevents CCND1 degradation during M-phase and enables S-phase transition (PubMed:21411630). With TJP1 and TJP2, participates in the junctional retention and stability of the transcription factor DBPA, but is not involved in its shuttling to the nucleus (By similarity). Contrary to TJP2, TJP3 is dispensable for individual viability, embryonic development, epithelial differentiation, and the establishment of TJs, at least in the laboratory environment (By similarity). (ECO:0000250 UniProtKB:062683, ECO:0000250 UniProtKB:Q9QXY1, ECO:0000269 PubMed:16129888, ECO:0000269 PubMed:21411630}.	
Molecular Weight:	101.4 kDa	
UniProt:	095049	
Application Details		
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.	

## **Application Details**

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Restrictions:

For Research Use only

# Handling

Format:	Liquid	
Buffer:	The buffer composition is at the discretion of the manufacturer.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>	
Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	
Expiry Date:	12 months	