

Datasheet for ABIN3095383

**SHANK2 Protein (AA 1-1470) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	SHANK2
Protein Characteristics:	AA 1-1470
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SHANK2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	<p>MKSLNNAFTK KEVPFREAPA YSNRRRRPPN TLAAPRVLLR SNSDNNLNAS APDWAVCSTA TSHRSLSPQL LQMPSKPEG AAKTIGSYVP GPRSRSPSLN RLGGAGEDGK RPQPLWHVGS PFALGANKDS LSAFEYGPGR RKLYSAPVGR LFVAVKPYQP QVDGEIPLHR GDRVKVLSIG EGGFWEVSAR GHIGWFPAEC VEEVQCKPRD SQAETRADRS KKLFRHYTVG SYDSFDTSSD CIIEEKTIVL QKKDNEGFGF VLRGAKADTP IEEFTPTPAF PALQYLESVD EGGVAWQAGL RTGDFLIEVN NENVVKVGHR QVVNMIRQGG NHLVLKVVTV TRNLDPDDTA RKKAPPPPKR APTTALTIRS KSMTSELEEL VDKASVRKKK DKPEEIVPAS KPSRAAENMA VEPRVATIKQ RPSSRCFPAG SDMNSVYERQ GIAVMTPTVP GSPKAPFLGI PRGTMRRQKS IDSRIFLSGI TEEERQFLAP PMLKFTRSLs MPDTSIEDIP PPQSVPPSP PPSPPTYNCP KSPTPRVYGT IKPAFNQNSA AKVSPATRS D TVATMMREKG MYFRRELDYR SLDSEDLYSR NAGPQANFRN KRGQMPENPY SEVGKIASKA VYVPAKPARR KGMLVKQSNV EDSPEKTC SI PIPTIIVKEP STSSSGKSSQ GSSMEIDPQA PEPPSQLRPD ESLTVSSPFA AAIAGAVRDR EKRLEARNS</p>
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PAFLSTDLDG EDVGLGPPAP RTRPSMFPEE GDFADESDAE QLSSPMPSAT PREPENHFVG  
GAEASAPGEA GRPLNSTSKA QGPESPAVP SASSGTAGPG NYVHPLTGRL LDPSSPLALA  
LSARDRAMKE SQQGPKGEAP KADLNKPLYI DTKMRPSLDA GFPTVTRQNT RGPLRRQETE  
NKYETDLGRD RKGDDKKNML IDIMDTSQK SAGLLMVHTV DATKLDNALQ EEDEKAEVEM  
KPDSSPSEVP EGVSETEGAL QISAAPEPTT VPGRTIVAVG SMEEAVILPF RIPPPPLASV  
DLDEDFIFTE PLPPPLEFAN SFDIPDDRRAA SVPALSDLVK QKKS DTPQSP SLNSSQPTNS  
ADSKKPASLS NCLPASFLPP PESFDAVADS GIEEVDSRSS SDHHLETTST ISTVSSISTL  
SSEGGENVDT CTVYADGQAF MVDKPPVPPK PKMKPIHKS NALYQDALVE EDVDSFVIPP  
PAPPPPPGSA QPGMAKVLQP RTSKLWGDVT EIKSPILSGP KANVISELNS ILQGMNREKL  
AKPGEGLDSP MGAKSASLAP RSPEIMSTIS GTRSTTVTFT VRPGTSQPIT LQSRPPDYES  
RTSGTRRAPS PVVSPTMKNK ETLPAPLSAA TASPSPALSD VFSLPSQPPS GDLFGLNPAG  
RSRSPSPSIL QQPISNKPFT TKPVHLWTKP DVADWLESLN LGEHKEAFMD NEIDGSHLPN  
LQKEDLIDLG VTRVGHRMNI ERALKQLLDR

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human SHANK2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use

## Product Details

the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells:  1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.  2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

## Target Details

Target:	SHANK2
Alternative Name:	SHANK2 ( <a href="#">SHANK2 Products</a> )
Background:	Seems to be an adapter protein in the postsynaptic density (PSD) of excitatory synapses that interconnects receptors of the postsynaptic membrane including NMDA-type and metabotropic glutamate receptors, and the actin-based cytoskeleton. May play a role in the structural and functional organization of the dendritic spine and synaptic junction.
Molecular Weight:	159.8 kDa Including tag.
UniProt:	<a href="#">Q9UPX8</a>

## 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.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process