

Datasheet for ABIN3131827
TNK2 Protein (AA 1-1055) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	TNK2
Protein Characteristics:	AA 1-1055
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TNK2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>MQPEEGTGWL LELLSEVQLQ QYFLRLRDDL NITRLSHFEY VKNEDLEKIG MGRPGQRRLLW EAVKRRKAMC KRKSWMSKVF SGKRLEAEFP SQHSQSTFRK PSPTPGSLPG EGTLSLTCL IGEKDLRLLE KLGDGSFGVV RRGWDAPAG KTVSVAVKCL KPDVLSQPEA MDDFIREVNA MHSLDHRNLI RLYGVVLTLP MKMVTTELAPL GSLLDRLRKH QGHFLLGTLS RYAVQVAEGM AYLESKRFIH RDLAARNLLL ATRDLVKIGD FGLMRALPQN DDHYVMQEHR KVPFAWCAPE SLKTRTFSHA SDTWMFGVTL WEMFTYGQEP WIGLNGSQIL HKIDKEGERL PRPEDCPQDI YNVMVQCWAH KPEDRPTFVA LRDFLLEAQP TDMRALQDFE EPDKLHIQMN DVITVIEGRA ENYWWRGQNT RTLCVGPFPFPR NVVTSVAGLS AQDISQPLQN SFIHTGHGDS DPRHCWGFPD RIDELYLGNP MDPPDLLSVE LSTSRTQHL GRVKREPPPR PPQPAIFTQK TTYDPVSEDP DPLSSDFKRL GLRKPALPRG LWLAKPSARV PGTKADRSSG GEVTLIDFGE EPVVPTPRPC APSLAQLAMD ACSLLDKTPP QSPTRALPRP LHPTPVVDWD ARPLPPPPAY DDVAQDEDDF EVCSINSTLV GAGLPAGPSQ GETNYAFVPE QAQMPPALED NLFLPPQGGG KPPSSVQTAE</p>
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IFQALQQECM RQLQVPTGQL TPSPTGGDD KPQVPPRVPI PPRPTRPRVE LSPAPSGEEE
TSRWPGPASP PRVPPREPLS PQGSRTSPSL VPPGSSPLPH RLSSSPGKTM PTTQSFASDP
KYATPQVIQA PGPRAGPCIL PIVRDGRKVS STHYLLPER PPYLERYQRF LREAQSPEEP
AALPVPPLLP PPSTPAPAAP TATVRPMPQA APDPKANFST NNSNPGARPP SLRAAARLPQ
RGCPGDGQEA ARPADKVQML QAMVHGVTTE ECQAALQSHS WSVQRAAQYL KVEQLFGLGL
RPRVECHKVL EMFDWNLEQA GCHLLGSCGP AHHKR

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.
- Mouse Tnk2 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 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.

Product Details

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:	TNK2
Alternative Name:	Tnk2 (TNK2 Products)
Background:	<p>Non-receptor tyrosine-protein and serine/threonine-protein kinase that is implicated in cell spreading and migration, cell survival, cell growth and proliferation. Transduces extracellular signals to cytosolic and nuclear effectors. Phosphorylates AKT1, AR, MCF2, WASL and WWOX. Implicated in trafficking and clathrin-mediated endocytosis through binding to epidermal growth factor receptor (EGFR) and clathrin. Binds to both poly- and mono-ubiquitin and regulates ligand-induced degradation of EGFR, thereby contributing to the accumulation of EGFR at the limiting membrane of early endosomes. Downstream effector of CDC42 which mediates CDC42-dependent cell migration via phosphorylation of BCAR1. May be involved both in adult synaptic function and plasticity and in brain development. Activates AKT1 by phosphorylating it on 'Tyr-176'. Phosphorylates AR on 'Tyr-267' and 'Tyr-363' thereby promoting its recruitment to androgen-responsive enhancers (AREs). Phosphorylates WWOX on 'Tyr-287'. Phosphorylates MCF2, thereby enhancing its activity as a guanine nucleotide exchange factor (GEF) toward Rho family proteins. Contributes to the control of AXL receptor levels. Confers metastatic properties on cancer cells and promotes tumor growth by negatively regulating tumor suppressor such as WWOX and positively regulating pro-survival factors such as AKT1 and AR. {ECO:0000269 PubMed:17182860, ECO:0000269 PubMed:20333297}.</p>
Molecular Weight:	117.9 kDa Including tag.
UniProt:	O54967

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:	Protein has not been tested for activity yet. In cases in which it is highly likely that the

Application Details

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