

Datasheet for ABIN3114392

TYRO3 Protein (AA 41-890) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TYRO3
Protein Characteristics:	AA 41-890
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TYRO3 protein is labelled with rho-1D4 tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	AGLKLMGAPV KLTVSQGGPV KLNCSEVGME EPDIQWVKDG AVVQNLDQLY IPVSEQHWIG FLSLKSVERS DAGRYWCQVE DGGETEISQP VWLTVGVVPF FTVEPKDLAV PPNAPFQLSC EAVGPPEPVT IVWWRGTTKI GGPAPSPSVL NVTGVTQSTM FSCEAHNLKG LASSRTATVH LQALPAAPFN ITVTKLSSSN ASVAWMPGAD GRALLQSCTV QVTQAPGGWE VLAVVVPVPP FTCLLRDLVP ATNYSRLVRC ANALGPSPYA DWVPFQTKGL APASAPQNLH AIRTDSGLIL EWEEVIPEAP LEGPLGPYKL SWVQDNGTQD ELTVETRAN LTGWDPQKDL IVRVCVSNV GCGPWSQPLV VSSHDRAGQQ GPPHSRTSWV PVVLGVLTAL VTAAALALIL LRKRRKETRF GQAFDSVMAR GEPVHFRAA RSFNRERPER IEATLDSLGI SDELKEKLED VLIPEQQFTL GRMLGKGEFG SVREAQLKQE DGSFVKVAVK MLKADIIASS DIEEFLREAA CMKEFDHPHV AKLVGVSLRS RAKGRLPIPM VILPFMKHGD LHAFLASRI GENPFNLPLQ TLIRFMVDIA CGMEYLSSRN FIHRDLAARN CMLAEDMTVC VADFGLSRKI YSGDYRQGC ASKLPVKWLA LESLADNLYT VQSDVWAFGV TMWEIMTRGQ TPYAGIENAE IYNYLIGGNR LKQPPECMED
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VYDLMYQCWS ADPKQRPSFT CLRMELENIL GQLSVLSASQ DPLYINIERA EEPTAGGSLE
LPGRDQPYSG AGDGSGMGAV GGTPSDCRYI LTPGGLAEQP GQAEHQPEPSP LNETQRLLLL
QQGLLPSSC

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 TYRO3 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:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractionated by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
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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:	TYRO3
Alternative Name:	TYRO3 (TYRO3 Products)
Background:	<p>Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to several ligands including TULP1 or GAS6. Regulates many physiological processes including cell survival, migration and differentiation. Ligand binding at the cell surface induces dimerization and autophosphorylation of TYRO3 on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with PIK3R1 and thereby enhances PI3-kinase activity. Activates the AKT survival pathway, including nuclear translocation of NF-kappa-B and up-regulation of transcription of NF-kappa-B-regulated genes. TYRO3 signaling plays a role in various processes such as neuron protection from excitotoxic injury, platelet aggregation and cytoskeleton reorganization. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces production of suppressors of cytokine signaling SOCS1 and SOCS3. {ECO:0000269 PubMed:20546121}, (Microbial infection) Acts as a receptor for lassa virus and lymphocytic choriomeningitis virus, possibly through GAS6 binding to phosphatidyl-serine at the surface of virion envelope (PubMed:25277499, PubMed:22156524, PubMed:22673088). Acts as a receptor for ebolavirus, possibly through GAS6 binding to phosphatidyl-serine at the surface of virion envelope (PubMed:17005688). {ECO:0000269 PubMed:17005688, ECO:0000269 PubMed:22156524, ECO:0000269 PubMed:22673088, ECO:0000269 PubMed:25277499}.</p>
Molecular Weight:	94.0 kDa Including tag.
UniProt:	Q06418
Pathways:	RTK Signaling

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

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