

Datasheet for ABIN3095852 NR4A3 Protein (AA 1-631) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	NR4A3
Protein Characteristics:	AA 1-631
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NR4A3 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence: MNFNTILEEI LIKRSQQKKK TSPLNYKERL FVLTKSMLTY YEGRAEKKYR KGFIDVSKIK
CVEIVKNDDG VIPCQNKYPF QVVHDANTLY IFAPSPQSRD LWVKKLKEEI KNNNNIMIKY
HPKFWTDGSY QCCRQTEKLA PGCEKYNLFE SSIRKALPPA PETKKRRPPP PIPLEEDNS
EEIVVAMYDF QAAEGHDLRL ERGQEYLILE KNDVHWWRAR DKYGNEGYIP SNYVTGKKS
NLDQYEWYCR NMNRSKAEQL LRSEDKEGGF MVRDSSQPGL YTVSLYTKFG GEGSSGFRHY
HIKETTTSPK KYLAEKHAF GSIPEIIEYH KHNAAGLVTR LRYPSVKGK NAPTTAGFSY
EKWEINPSEL TFMRELGSGL FGVRGKWR AQYKVAIKAI REGAMCEEDF IEEAKVMMKL
THPKLVQLYG VCTQQKPIYI VTEFMERGCL LNFLRQRQGH FSRDVLLSMC QDVCEGMEYL
ERNSFIHRDL AARNCLVSEA GVVKVSDFGM ARYVLDDQYT SSSGAKFPVK WCPPEVFNYS
RFSSKSDVWS FGVLMWEVFT EGRMPFEKYT NYEVVTMVTR GHRLYQPKLA SNYVVEVMLR
CWQEKPEGRP SFEDLLRTID ELVECEETFG R

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 TEC 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.

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:	NR4A3
Alternative Name:	TEC (NR4A3 Products)
Background:	<p>Non-receptor tyrosine kinase that contributes to signaling from many receptors and participates as a signal transducer in multiple downstream pathways, including regulation of the actin cytoskeleton. Plays a redundant role to ITK in regulation of the adaptive immune response. Regulates the development, function and differentiation of conventional T-cells and nonconventional NKT-cells. Required for TCR-dependent IL2 gene induction. Phosphorylates DOK1, one CD28-specific substrate, and contributes to CD28-signaling. Mediates signals that negatively regulate IL2RA expression induced by TCR cross-linking. Plays a redundant role to BTK in BCR-signaling for B-cell development and activation, especially by phosphorylating STAP1, a BCR-signaling protein. Required in mast cells for efficient cytokine production. Involved in both growth and differentiation mechanisms of myeloid cells through activation by the granulocyte colony-stimulating factor CSF3, a critical cytokine to promoting the growth, differentiation, and functional activation of myeloid cells. Participates in platelet signaling downstream of integrin activation. Cooperates with JAK2 through reciprocal phosphorylation to mediate cytokine-driven activation of FOS transcription. GRB10, a negative modifier of the FOS activation pathway, is another substrate of TEC. TEC is involved in G protein-coupled receptor- and integrin-mediated signalings in blood platelets. Plays a role in hepatocyte proliferation and liver regeneration and is involved in HGF-induced ERK signaling pathway. TEC regulates also FGF2 unconventional secretion (endoplasmic reticulum (ER)/Golgi-independent mechanism) under various physiological conditions through phosphorylation of FGF2 'Tyr-215'. May also be involved in the regulation of osteoclast differentiation. {ECO:0000269 PubMed:10518561, ECO:0000269 PubMed:19883687, ECO:0000269 PubMed:20230531, ECO:0000269 PubMed:9753425}.</p>
Molecular Weight:	74.5 kDa Including tag.
UniProt:	P42680
Pathways:	Fc-epsilon Receptor Signaling Pathway , Nuclear Receptor Transcription Pathway , Steroid Hormone Mediated Signaling Pathway

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.
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Application Details

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