Datasheet for ABIN7563946

JAK3 Protein (AA 1-1100) (His tag)

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Overview

Quantity:	1 mg
Target:	JAK3
Protein Characteristics:	AA 1-1100
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This JAK3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Jak3 Protein expressed in mammalien cells.
Sequence:	MAPPSEETPL IPQRSCSLSS SEAGALHVLL PPRGPGPPQR LSFSFGDYLA EDLCVRAAKA CGILPVYHSL FALATEDFSC WFPPSHIFCI EDVDTQVLVY RLRFYFPDWF GLETCHRFGL RKDLTSAILD LHVLEHLFAQ HRSDLVSGRL PVGLSMKEQG EFLSLAVLDL AQMAREQAQR PGELLKTVSY KACLPPSLRD VIQGQNFVTR RRIRRTVVLA LRRVVACQAD RYALMAKYIL DLERLHPAAT TETFRVGLPG AQEEPGLLRV AGDNGISWSS GDQELFQTFC DFPEIVDVSI KQAPRVGPAG EHRLVTVTRM DGHILEAEFP GLPEALSFVA LVDGYFRLIC DSRHYFCKEV APPRLLEEEA ELCHGPITLD FAIHKLKAAG SLPGTYILRR SPQDYDSFLL TACVQTPLGP DYKGCLIRQD PSGAFSLVGL SQPHRSLREL LAACWNSGLR VDGAALNLTS CCAPRPKEKS NLIVVRRGCT PAPAPGCSPS CCALTQLSFH TIPTDSLEWH ENLGHGSFTK IFRGRRREVV DGETHDSEVL LKVMDSRHRN CMESFLEAAS LMSQVSYPHL VLLHGVCMAG DSIMVQEFVY LGAIDMYLRK RGHLVSASWK LQVTKQLAYA LNYLEDKGLP HGNVSARKVL LAREGGDGNP

Product Details

	PFIKLSDPGV SPTVLSLEML TDRIPWVAPE CLQEAQTLCL EADKWGFGAT TWEVFSGGPA HITSLEPAKK LKFYEDQGQL PALKWTELAG LITQCMAYDP GRRPSFRAIL RDLNGLITSD YELLSDPTPG IPSPRDELCG GAQLYACQDP AIFEERHLKY ISLLGKGNFG SVELCRYDPL GDNTGPLVAV KQLQHSGPDQ QRDFQREIQI LKALHSDFIV KYRGVSYGPG RQSLRLVMEY LPSGCLRDFL QRHRARLHTD RLLLFAWQIC KGMEYLGARR CVHRDLAARN ILVESEAHVK IADFGLAKLL PLGKDYYVVR EPGQSPIFWY APESLSDNIF SRQSDVWSFG VVLYELFTYC DKSCSPSAEF LRMMGPEREG PPLCRLLELL AEGRRLPPPP TCPTEVQELM QLCWAPSPHD RPAFGTLSPQ LDALWRGRPG **Sequence without tag. The proposed Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	JAK3
Alternative Name:	Jak3 (JAK3 Products)
Background:	Tyrosine-protein kinase JAK3 (EC 2.7.10.2) (Janus kinase 3) (JAK-3),FUNCTION: Non-receptor tyrosine kinase involved in various processes such as cell growth, development, or differentiation. Mediates essential signaling events in both innate and adaptive immunity and

Target Details

	plays a crucial role in hematopoiesis during T-cells development. In the cytoplasm, plays a pivotal role in signal transduction via its association with type I receptors sharing the common subunit gamma such as IL2R, IL4R, IL7R, IL9R, IL15R and IL21R. Following ligand binding to cell surface receptors, phosphorylates specific tyrosine residues on the cytoplasmic tails of the receptor, creating docking sites for STATs proteins. Subsequently, phosphorylates the STATs proteins once they are recruited to the receptor. Phosphorylated STATs then form homodimer or heterodimers and translocate to the nucleus to activate gene transcription. For example, upon IL2R activation by IL2, JAK1 and JAK3 Molecules bind to IL2R beta (IL2RB) and gamma chain (IL2RG) subunits inducing the tyrosine phosphorylation of both receptor subunits on their cytoplasmic domain. Then, STAT5A and STAT5B are recruited, phosphorylated and activated by JAK1 and JAK3. Once activated, dimerized STAT5 translocates to the nucleus and promotes the transcription of specific target genes in a cytokine-specific fashion. {ECO:0000269|PubMed:9016869}.
Molecular Weight:	122.6 kDa
UniProt:	Q62137
Pathways:	JAK-STAT Signaling, RTK Signaling, Response to Growth Hormone Stimulus, Regulation of Leukocyte Mediated Immunity, Production of Molecular Mediator of Immune Response, Protein targeting to Nucleus, Activated T Cell Proliferation, Unfolded Protein Response

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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months

