Datasheet for ABIN3134423

JAK1 Protein (AA 1-1153) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	JAK1
Protein Characteristics:	AA 1-1153
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This JAK1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MQYLNIKEDC NAMAFCAKMR SFKKTEVKQV VPEPGVEVTF YLLDREPLRL GSGEYTAEEL CIRAAQECSI SPLCHNLFAL YDESTKLWYA PNRIITVDDK TSLRLHYRMR FYFTNWHGTN DNEQSVWRHS PKKQKNGYEK KRVPEATPLL DASSLEYLFA QGQYDLIKCL APIRDPKTEQ DGHDIENECL GMAVLAISHY AMMKKMQLPE LPKDISYKRY IPETLNKSIR QRNLLTRMRI NNVFKDFLKE FNNKTICDSS VHDLKVKYLA TLETSTLTKH YGAEIFETSM LLISSENELS RCHSNDSGNV LYEVMVTGNL GIQWRQKPNV VPVEKEKNKL KRKKLEYNKH KKDDERNKLR EEWNNFSYFP EITHIVIKES VVSINKQDNK NMELKLSSRE EALSFVSLVD GYFRLTADAH HYLCTDVAPP LIVHNIQNGC HGPICTEYAI NKLRQEGSEE GMYVLRWSCT DFDNILMTVT CFEKSEVLGG QKQFKNFQIE VQKGRYSLHG SMDHFPSLRD LMNHLKKQIL RTDNISFVLK RCCQPKPREI SNLLVATKKA QEWQPVYSMS QLSFDRILKK DIIQGEHLGR GTRTHIYSGT LLDYKDEEGI AEEKKIKVIL KVLDPSHRDI SLAFFEAASM MRQVSHKHIV YLYGVCVRDV ENIMVEEFVE GGPLDLFMHR KSDALTTPWK FKVAKQLASA LSYLEDKDLV HGNVCTKNLL

LAREGIDSDI GPFIKLSDPG IPVSVLTRQE CIERIPWIAP ECVEDSKNLS VAADKWSFGT TLWEICYNGE IPLKDKTLIE KERFYESRCR PVTPSCKELA DLMTRCMNYD PNQRPFFRAI MRDINKLEEQ NPDIVSEKQP TTEVDPTHFE KRFLKRIRDL GEGHFGKVEL CRYDPEGDNT GEQVAVKSLK PESGGNHIAD LKKEIEILRN LYHENIVKYK GICMEDGGNG IKLIMEFLPS GSLKEYLPKN KNKINLKQQL KYAIQICKGM DYLGSRQYVH RDLAARNVLV ESEHQVKIGD FGLTKAIETD KEYYTVKDDR DSPVFWYAPE CLIQCKFYIA SDVWSFGVTL HELLTYCDSD FSPMALFLKM IGPTHGQMTV TRLVKTLKEG KRLPCPPNCP DEVYQLMRKC WEFQPSNRTT FQNLIEGFEA LLK

Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Product Details

	Concentration: • 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. • We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	JAK1
Alternative Name:	Jak1 (JAK1 Products)
Background:	Tyrosine-protein kinase JAK1 (EC 2.7.10.2) (Janus kinase 1) (JAK-1),FUNCTION: Tyrosine kinase of the non-receptor type, involved in the IFN-alpha/beta/gamma signal pathway. Kinase partner for the interleukin (IL)-2 receptor as well as interleukin (IL)-10 receptor. Kinase partner for the type I interferon receptor IFNAR2. In response to interferon-binding to IFNAR1-IFNAR2 heterodimer, phosphorylates and activates its binding partner IFNAR2, creating docking sites for STAT proteins. Directly phosphorylates STAT proteins but also activates STAT signaling through the transactivation of other JAK kinases associated with signaling receptors. {ECO:0000250|UniProtKB:P23458}.
Molecular Weight:	133.4 kDa
UniProt:	P52332
Pathways:	JAK-STAT Signaling, RTK Signaling, Interferon-gamma Pathway, Hepatitis C, Toll-Like Receptors Cascades, 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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)