Datasheet for ABIN3137475

NFKB2 Protein (AA 1-899) (His tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	NFKB2
Protein Characteristics:	AA 1-899
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFKB2 protein is labelled with His tag.
Application:	Western Blotting (WB), Crystallization (Crys), ELISA, SDS-PAGE (SDS)

Product Details

Sequence:	MDNCYDPGLD GIPEYDDFEF SPSIVEPKDP APETADGPYL VIVEQPKQRG FRFRYGCEGP SHGGLPGASS EKGRKTYPTV KICNYEGPAK IEVDLVTHSD PPRAHAHSLV GKQCSELGVC AVSVGPKDMT AQFNNLGVLH VTKKNMMEIM IQKLQRQRLR SKPQGLTEAE RRELEQEAKE LKKVMDLSIV RLRFSAFLRA SDGSFSLPLK PVISQPIHDS KSPGASNLKI SRMDKTAGSV RGGDEVYLLC DKVQKDDIEV RFYEDDENGW QAFGDFSPTD VHKQYAIVFR TPPYHKMKIE RPVTVFLQLK RKRGGDVSDS KQFTYYPLVE DKEEVQRKRR KALPTFSQPF GGGSHMGGGS GGSAGGYGGA GGGGSLGFFS SSLAYNPYQS GAAPMGCYPG GGGGAQMAGS RRDTDAGEGA EEPRTPPEAP QGEPQALDTL QRAREYNARL FGLAQRSARA LLDYGVTADA RALLAGQRHL LMAQDENGDT PLHLAIIHGQ TGVIEQIAHV IYHAQYLGVI NLTNHLHQTP LHLAVITGQT RVVSFLLQVG ADPTLLDRHG DSALHLALRA GAAAPELLQA LLRSGAHAVP QILHMPDFEG LYPVHLAVHA RSPECLDLLV DCGAEVEAPE RQGGRTALHL ATEMEELGLV THLVTKLHAN VNARTFAGNT PLHLAAGLGS PTLTRLLLKA GADIHAENEE PLCPLPSPST SGSDSDSEGP

	ERDTQRNFRG HTPLDLTCST KVKTLLLNAA QNTTEPPLAP PSPAGPGLSL GDAALQNLEQ LLDGPEAQGS WAELAERLGL RSLVDTYRKT PSPSGSLLRS YKLAGGDLVG LLEALSDMGL HEGVRLLKGP ETRDKLPSTE VKEDSAYGSQ SVEQEAEKLC PPPEPPGGLC HGHPQPQVH **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 Nfkb2 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 receival 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

Product Details

Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	NFKB2
Alternative Name:	Nfkb2 (NFKB2 Products)
Background:	NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain-containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. In a non-canonical activation pathway, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. The NF-kappa-B heterodimeric RelB-p52 complex is a transcriptional activator. The NF-kappa-B p52-p52 homodimer is a transcriptional repressor. NFKB2 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p100 and generation of p52 by a cotranslational processing. The proteasome-mediated process ensures the production of both p52 and p100 and preserves their independent function. p52 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. p52 and p100 are respectively the minor and major form, the processing of p100 being relatively poor. Isoform p49 is a subunit of the NF-kappa-B protein complex, which stimulates the HIV enhancer in synergy with p65 (By similarity). In concert with RELB, regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer. {ECO:0000250, ECO:0000269|PubMed:22894897}.

Target Details

Molecular Weight:	97.8 kDa Including tag.
UniProt:	Q9WTK5
Pathways:	Toll-Like Receptors Cascades

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 gurantee though.
Comment:	Protein has not been tested for activity yet. 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)

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process