Datasheet for ABIN7554183

IKKi/IKKe Protein (AA 1-716) (His tag)

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Overview

Quantity:	1 mg
Target:	IKKi/IKKe (IKBKE)
Protein Characteristics:	AA 1-716
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IKKi/IKKe protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat IKBKE Protein expressed in mammalien cells.
Sequence:	MQSTANYLWH TDDLLGQGAT ASVYKARNKK SGELVAVKVF NTTSYLRPRE VQVREFEVLR KLNHQNIVKL FAVEETGGSR QKVLVMEYCS SGSLLSVLES PENAFGLPED EFLVVLRCVV AGMNHLRENG IVHRDIKPGN IMRLVGEEGQ SIYKLTDFGA ARELDDDEKF VSVYGTEEYL HPDMYERAVL RKPQQKAFGV TVDLWSIGVT LYHAATGSLP FIPFGGPRRN KEIMYRITTE KPAGAIAGAQ RRENGPLEWS YTLPITCQLS LGLQSQLVPI LANILEVEQA KCWGFDQFFA ETSDILQRVV VHVFSLSQAV LHHIYIHAHN TIAIFQEAVH KQTSVAPRHQ EYLFEGHLCV LEPSVSAQHI AHTTASSPLT LFSTAIPKGL AFRDPALDVP KFVPKVDLQA DYNTAKGVLG AGYQALRLAR ALLDGQELMF RGLHWVMEVL QATCRRTLEV ARTSLLYLSS SLGTERFSSV AGTPEIQELK AAAELRSRLR TLAEVLSRCS QNITETQESL SSLNRELVKS RDQVHEDRSI QQIQCCLDKM NFIYKQFKKS RMRPGLGYNE EQIHKLDKVN FSHLAKRLLQ VFQEECVQKY QASLVTHGKR MRVVHETRNH LRLVGCSVAA CNTEAQGVQE SLSKLLEELS HQLLQDRAKG

Product Details

	AQASPPPIAP YPSPTRKDLL LHMQELCEGM KLLASDLLDN NRIIERLNRV PAPPDV **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:	IKKi/IKKe (IKBKE)
Alternative Name:	IKBKE (IKBKE Products)
Background:	Inhibitor of nuclear factor kappa-B kinase subunit epsilon (I-kappa-B kinase epsilon) (IKK-E) (IKK-epsilon) (IkBKE) (EC 2.7.11.10) (Inducible I kappa-B kinase) (IKK-i),FUNCTION: Serine/threonine kinase that plays an essential role in regulating inflammatory responses to viral infection, through the activation of the type I IFN, NF-kappa-B and STAT signaling. Also involved in TNFA and inflammatory cytokines, like Interleukin-1, signaling. Following activation of viral RNA sensors, such as RIG-I-like receptors, associates with DDX3X and phosphorylates interferon regulatory factors (IRFs), IRF3 and IRF7, as well as DDX3X. This activity allows subsequent homodimerization and nuclear translocation of the IRF3 leading to transcriptional activation of pro-inflammatory and antiviral genes including IFNB. In order to establish such an

Target Details

	antiviral state, IKBKE forms several different complexes whose composition depends on the type of cell and cellular stimuli. Thus, several scaffolding molecules including IPS1/MAVS, TANK, AZI2/NAP1 or TBKBP1/SINTBAD can be recruited to the IKBKE-containing-complexes. Activated by polyubiquitination in response to TNFA and interleukin-1, regulates the NF-kappa-B signaling pathway through, at least, the phosphorylation of CYLD. Phosphorylates inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. In addition, is also required for the induction of a subset of ISGs which displays antiviral activity, may be through the phosphorylation of STAT1 at 'Ser-708'. Phosphorylation of STAT1 at 'Ser-708' seems also to promote the assembly and DNA binding of ISGF3 (STAT1:STAT2:IRF9) complexes compared to GAF (STAT1:STAT1) complexes, in this way regulating the balance between type I and type II IFN responses. Protects cells against DNA damage-induced cell death. Also plays an important role in energy balance regulation by sustaining a state of chronic, low-grade inflammation in obesity, wich leads to a negative impact on insulin sensitivity. Phosphorylates AKT1. {ECO:0000269|PubMed:17568778, ECO:0000269|PubMed:18583960, ECO:0000269|PubMed:19153231, ECO:0000269|PubMed:20188669, ECO:0000269|PubMed:21138416, ECO:0000269|PubMed:21464307, ECO:0000269|PubMed:22532683, ECO:0000269|PubMed:23453969, ECO:0000269|PubMed:23478265}.
Molecular Weight:	80.5 kDa
UniProt:	Q14164
Pathways:	TLR Signaling, Activation of Innate immune Response, Hepatitis C, 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 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.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months