Datasheet for ABIN5713290

BTK Protein (AA 2-659) (His tag)

1 Image

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Overview

Quantity:	100 µg
Target:	BTK
Protein Characteristics:	AA 2-659
Origin:	Human
Source:	Yeast
Protein Type:	Recombinant
Purification tag / Conjugate:	This BTK protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

Product Details

Sequence:	AAVILESIFL KRSQQKKKTS PLNFKKRLFL LTVHKLSYYE YDFERGRRGS KKGSIDVEKI TCVETVVPEK NPPPERQIPR RGEESSEMEQ ISIIERFPYP FQVVYDEGPL YVFSPTEELR KRWIHQLKNV IRYNSDLVQK YHPCFWIDGQ YLCCSQTAKN AMGCQILENR NGSLKPGSSH RKTKKPLPPT PEEDQILKKP LPPEPAAAPV STSELKKVVA LYDYMPMNAN DLQLRKGDEY FILEESNLPW WRARDKNGQE GYIPSNYVTE AEDSIEMYEW YSKHMTRSQA EQLLKQEGKE GGFIVRDSSK AGKYTVSVFA KSTGDPQGVI RHYVVCSTPQ SQYYLAEKHL FSTIPELINY HQHNSAGLIS RLKYPVSQQN KNAPSTAGLG YGSWEIDPKD LTFLKELGTG QFGVVKYGKW RGQYDVAIKM IKEGSMSEDE FIEEAKVMMN LSHEKLVQLY GVCTKQRPIF IITEYMANGC LLNYLREMRH RFQTQQLLEM CKDVCEAMEY LESKQFLHRD LAARNCLVND QGVVKVSDFG LSRYVLDDEY TSSVGSKFPV RWSPPEVLMY SKFSSKSDIW AFGVLMWEIY SLGKMPYERF TNSETAEHIA QGLRLYRPHL ASEKVYTIMY SCWHEKADER PTFKILLSNI LDVMDEES
Purification:	SDS-PAGE

Product Details

Purity:	> 90 %

Target Details

Target:	BTK
Alternative Name:	BTK (BTK Products)
Background:	Non-receptor tyrosine kinase indispensable for B lymphocyte development, differentiation and signaling. Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation. After BCR engagent and activation at the plasma mbrane, phosphorylates PLCG2 at several sites, igniting the downstream signaling pathway through calcium mobilization, followed by activation of the protein kinase C (PKC) family mbers. PLCG2 phosphorylation is performed in close cooperation with the adapter protein B-cell linker protein BLNK. BTK acts as a platform to bring together a diverse array of signaling proteins and is implicated in cytokine receptor signaling pathways. Plays an important role in the function of immune cells of innate as well as adaptive immunity, as a component of the Toll-like receptors (TLR) pathway. The TLR pathway acts as a primary surveillance syst for the detection of pathogens and are crucial to the activation of host defense. Especially, is a critical molecule in regulating TLR9 activation in splenic B-cells. Within the TLR pathway, induces tyrosine phosphorylation of TIRAP which leads to TIRAP degradation. BTK plays also a critical role in transcription regulation. Induces the activity of NF-kappa-B, which is involved in regulating the expression of hundreds of genes. BTK is involved on the signaling pathway linking TLR8 and TLR9 to NF-kappa-B. Transiently phosphorylates transcription factor GTF2I on tyrosine residues in response to BCR. GTF2I then translocates to the nucleus to bind regulatory enhancer elents to modulate gene expression. ARID3A and NFAT are other transcriptional target of BTK. BTK is required for the formation of functional ARID3A DNA-binding complexes. There is however no evidence that BTK itself binds directly to DNA. BTK has a dual role in the regulation of apoptosis.
Molecular Weight:	78.1 kDa
UniProt:	Q06187
Pathways:	Fc-epsilon Receptor Signaling Pathway, Hormone Transport, Activation of Innate immune Response, Regulation of Leukocyte Mediated Immunity, Production of Molecular Mediator of Immune Response, Toll-Like Receptors Cascades, BCR Signaling

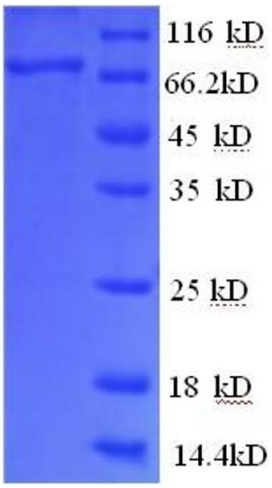
Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.1-2 mg/mL
Buffer:	20 mM Tris-HCl based buffer, pH 8.0
Storage:	-80 °C,4 °C,-20 °C
Storage Comment:	Store at -20°C, for extended storage, conserve at -20°C or -80°C. Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Images



SDS-PAGE

Image 1.