

Datasheet for ABIN3030208
anti-BTK antibody (AA 396-430)



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3 Images

Overview

Quantity:	0.4 mL
Target:	BTK
Binding Specificity:	AA 396-430
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BTK antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This BTK antibody was produced from a rabbit immunized with a KLH conjugated synthetic peptide between 396-430 amino acids from the Central region of human BTK.
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Expected species reactivity: Chicken
Purification:	Antigen affinity purified

Target Details

Target:	BTK
Alternative Name:	BTK (BTK Products)
Background:	Non-receptor tyrosine kinase indispensable for B lymphocyte development, differentiation and

Target Details

signaling. Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation. After BCR engagement and activation at the plasma membrane, phosphorylates PLCG2 at several sites, igniting the downstream signaling pathway through calcium mobilization, followed by activation of the protein kinase C (PKC) family members. 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 system 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 elements 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.

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:	Titration of the BTK antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:500-1000
Restrictions:	For Research Use only

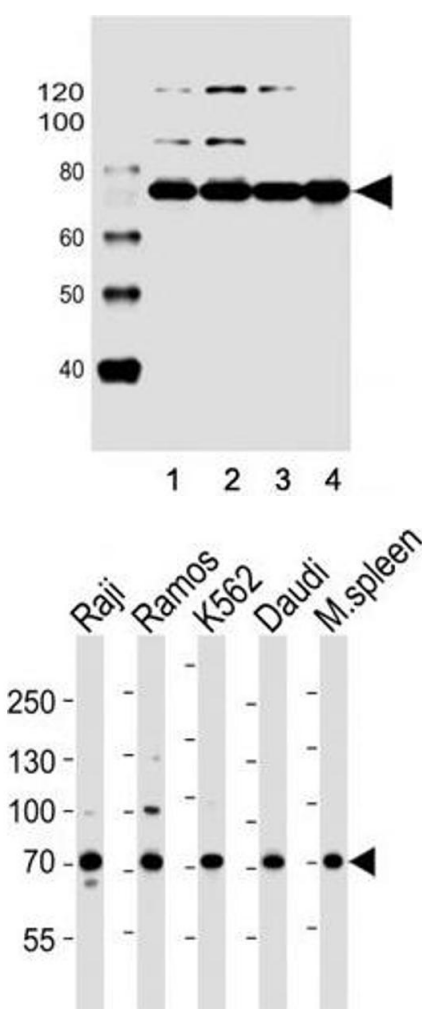
Handling

Format:	Liquid
Buffer:	In 1X PBS, pH 7.4, with 0.09 % sodium azide

Handling

Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Aliquot the BTK antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.

Images

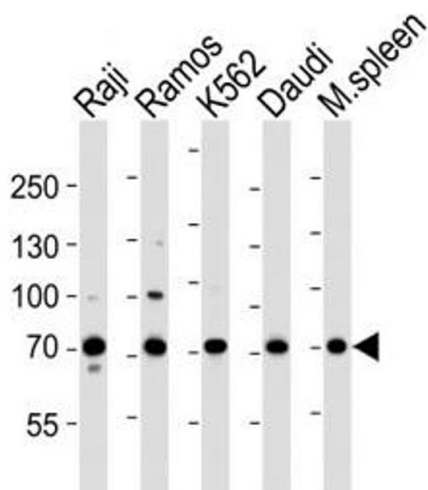


Western Blotting

Image 1. Western blot analysis of lysate from (1) Raji, (2) Ramos, (3) K562 cell line and (4) mouse spleen tissue lysate using BTK antibody at 1:1000.

Western Blotting

Image 2. Western blot analysis of lysate from Raji, Ramos, K562, Daudi cell line and mouse spleen tissue lysate using BTK antibody at 1:1000.



Western Blotting

Image 3. Western blot analysis of lysate from Raji, Ramos, K562, Daudi cell line and mouse spleen tissue lysate using BTK antibody at 1:1000.