

Datasheet for ABIN6241845
anti-BTK antibody



[Go to Product page](#)

2 Images

Overview

| | |
|--------------|---|
| Quantity: | 100 µL |
| Target: | BTK |
| Reactivity: | Human |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This BTK antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunoprecipitation (IP) |

Product Details

| | |
|------------|---------------------|
| Immunogen: | Recombinant Protein |
|------------|---------------------|

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 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 |

Target Details

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.

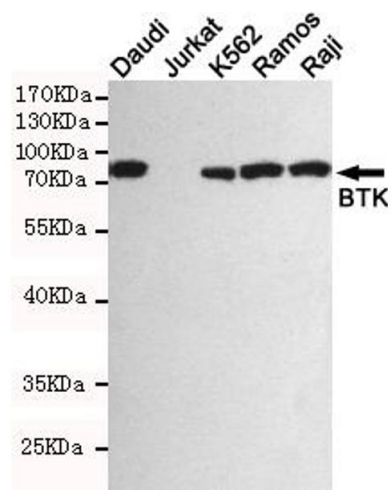
| | |
|-----------|---|
| UniProt: | Q06187 |
| Pathways: | Fc-epsilon Receptor Signaling Pathway , Hormone Transport , Activation of Innate immune Response , Regulation of Leukocyte Mediated Immunity , Production of Molecular Mediator of Immune Response , Toll-Like Receptors Cascades , BCR Signaling |

Application Details

| | |
|--------------------|-----------------------|
| Application Notes: | IP: 1:500. WB: 1:1000 |
| Restrictions: | For Research Use only |

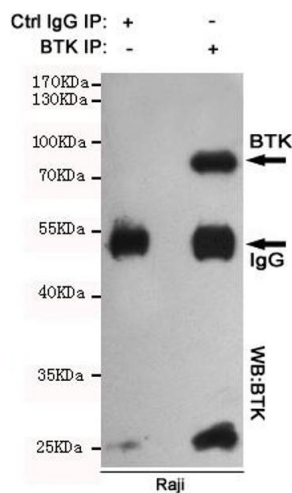
Handling

| | |
|----------|-------------|
| Format: | Liquid |
| Storage: | 4 °C,-20 °C |



Western Blotting

Image 1. Western blot detection of BTK in Daudi, Jurkat (BTK negative), K562, Ramos and Raji cell lysates using BTK mouse mAb (1:1000 diluted). Predicted band size: 77KDa. Observed band size: 77KDa.



Immunoprecipitation

Image 2. Immunoprecipitation analysis of Raji cell lysates using BTK mouse mAb.