

Datasheet for ABIN7174011
anti-BTK antibody (AA 254-443)



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3 Images

Overview

Quantity:	100 µg
Target:	BTK
Binding Specificity:	AA 254-443
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BTK antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Tyrosine-protein kinase BTK protein (254-443AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	>95%, Protein G purified

Target Details

Target:	BTK
Alternative Name:	BTK (BTK Products)
Background:	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 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.

Aliases: Agammaglobulinaemia tyrosine kinase antibody, AGMX 1 antibody, AGMX1 antibody, AT antibody, ATK antibody, B cell progenitor kinase antibody, B-cell progenitor kinase antibody, BPK antibody, Bruton agammaglobulinemia tyrosine kinase antibody, Bruton tyrosine kinase antibody, Bruton Tyrosine Kinase antibody, Btk antibody, BTK_HUMAN antibody, dominant-negative kinase-deficient Brutons tyrosine kinase antibody, IMD 1 antibody, IMD1 antibody, MGC126261 antibody, MGC126262 antibody, OTTHUMP00000063593 antibody, PSCTK 1 antibody, PSCTK1 antibody, truncated Bruton agammaglobulinemia tyrosine kinase antibody, Tyrosine protein kinase BTK antibody, Tyrosine-protein kinase BTK antibody, tyrosine-protein kinase BTK isoform (lacking exon 14 antibody, XLA antibody

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

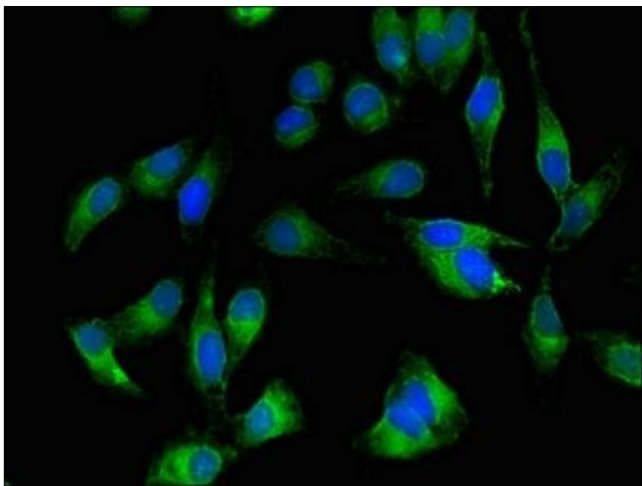
Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:20-1:200, IF:1:50-1:200,
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Application Details

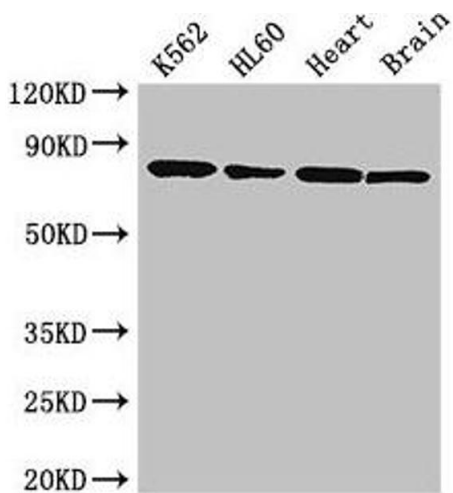
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



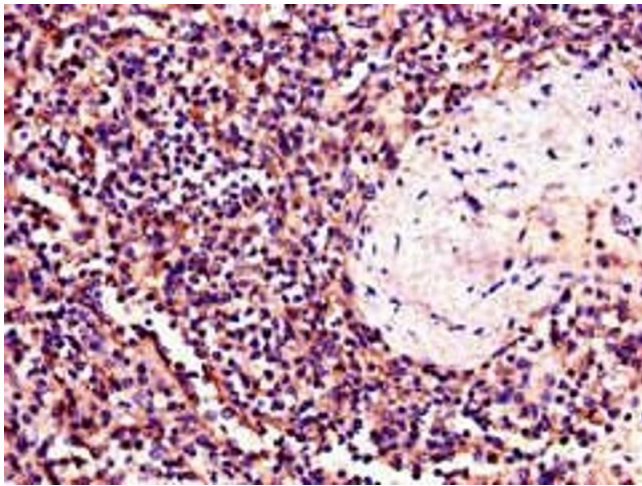
Immunofluorescence

Image 1. Immunofluorescent analysis of HeLa cells using ABIN7174011 at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



Western Blotting

Image 2. Western Blot Positive WB detected in: K562 whole cell lysate, HL60 whole cell lysate, Mouse heart tissue, Mouse brain tissue All lanes: BTK antibody at 3.5 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 77, 80 kDa Observed band size: 77 kDa



Immunohistochemistry

Image 3. Immunohistochemistry of paraffin-embedded human spleen tissue using ABIN7174011 at dilution of 1:100