

Datasheet for ABIN7127372

**Recombinant anti-BTK antibody**[Go to Product page](#)**1** Image

## Overview

Quantity:	100 µL
Target:	BTK
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This BTK antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC)

## Product Details

Immunogen:	A synthesized peptide derived from human BTK
Clone:	3E5
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

## Target Details

Target:	BTK
Alternative Name:	BTK ( <a href="#">BTK Products</a> )
Background:	Background: Non-receptor tyrosine kinase indispensable for B lymphocyte development,

## Target Details

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: Tyrosine-protein kinase BTK (EC 2.7.10.2) (Agammaglobulinemia tyrosine kinase) (ATK) (B-cell progenitor kinase) (BPK) (Bruton tyrosine kinase), BTK, AGMX1 ATK BPK

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: IHC:1:50-1:200,

Restrictions: For Research Use only

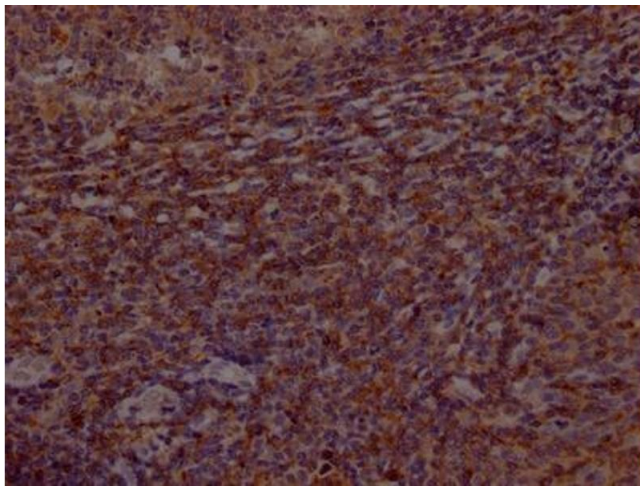
## Handling

Format: Liquid

## Handling

Buffer:	Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
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,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



### Immunohistochemistry

**Image 1.** IHC image of ABIN7127372 diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.