Product datasheet

Anti-BTK Antibody

Catalog Number: *PB0104*

BOSTER
antibody and ELISA experts
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Basic Information

Product Name	Anti-BTK Antibody
Gene Name	BTK
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB,IHC
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human BTK recombinant protein (Position: A2-P340). Human BTK shares 98% amino acid (aa) sequence identity with mouse BTK.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	76 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

Storage

12 months from date of receipt，-20℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

Background Information

BTK, also known as Bruton's tyrosine kinase, is an enzyme that in humans is encoded by the BTK gene. It is mapped to Xq22.1. BTK plays a crucial role in B cell maturation as well as mast cell activation through the high-affinity IgE receptor. BTK contains a PH domain that binds phosphatidylinositol (3,4,5)-trisphosphate (PIP3). PIP3 binding induces BTK to phosphorylate phospholipase C, which in turn hydrolyzes PIP2, a phosphatidylinositol, into two second messengers, inositol triphosphate (IP3) and diacylglycerol (DAG), which then go on to modulate the activity of downstream proteins during B-cell signalling. This gene also regulates both TLR9 activation and expression in B lymphocytes and is necessary for inhibitory cytokine expression.

Reference

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Anti-BTK Antibody被引用在1文献中。

Selected Validation Data

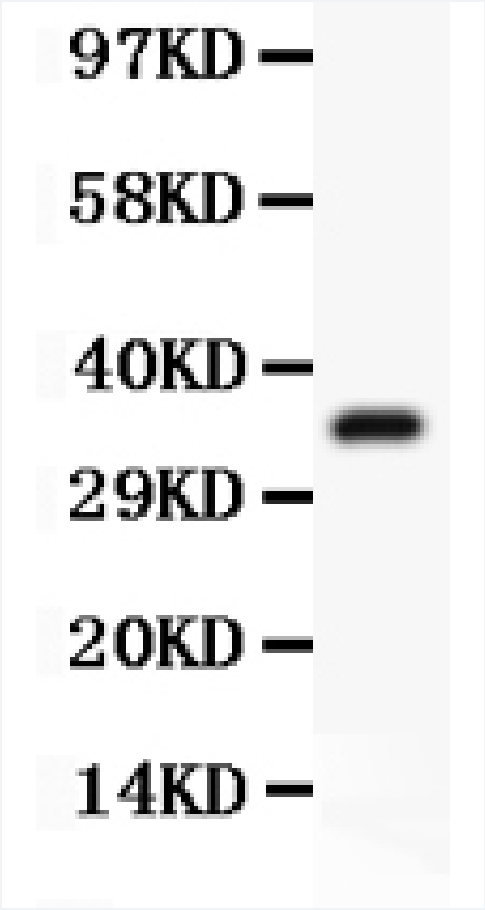

Figure 1. Western blot analysis of BTK using anti-BTK antibody (PB0104). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: Recombinant Human BTK Protein 0.5ng. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-BTK antigen affinity purified polyclonal antibody (Catalog # PB0104) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for BTK at approximately 36KD. The expected band size for BTK is at 36KD.

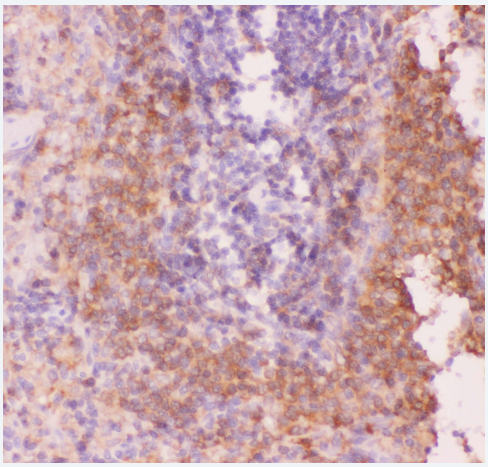

Figure 3. IHC analysis of BTK using anti-BTK antibody (PB0104).BTK was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-BTK Antibody (PB0104) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.