

## Btk (phospho Tyr223) Polyclonal Antibody

Catalog No: YP0287

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA

Target: Btk

Fields: >>NF-kappa B signaling pathway;>>Osteoclast differentiation;>>Platelet

activation;>>B cell receptor signaling pathway;>>Fc epsilon RI signaling pathway;>>Epstein-Barr virus infection;>>Primary immunodeficiency

Gene Name: BTK

**Protein Name:** Tyrosine-protein kinase BTK

Q06187

P35991

Human Gene Id: 695

**Human Swiss Prot** 

No:

Mouse Gene Id: 12229

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

BTK around the phosphorylation site of Tyr223. AA range:188-237

**Specificity:** Phospho-Btk (Y223) Polyclonal Antibody detects endogenous levels of Btk

protein only when phosphorylated at Y223.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



**Concentration**: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 80kD

**Cell Pathway:** B\_Cell\_Antigen;Fc epsilon RI;Primary immunodeficiency;

**Background :** The protein encoded by this gene plays a crucial role in B-cell development.

Mutations in this gene cause X-linked agammaglobulinemia type 1, which is an immunodeficiency characterized by the failure to produce mature B lymphocytes, and associated with a failure of Ig heavy chain rearrangement. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by

RefSeq, Dec 2013],

**Function :** catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine

phosphate.,cofactor:Binds 1 zinc ion per subunit.,disease:Defects in BTK are the cause of X-linked agammaglobulinemia (XLA) [MIM:300755]; also called X-linked agammaglobulinemia type 1 (AGMX1) or immunodeficiency type 1 (IMD1). XLA is a humoral immunodeficiency disease which results in developmental defects in the maturation pathway of B-cells. Affected boys have normal levels of pre-B-cells in their bone marrow but virtually no circulating mature B-lymphocytes. This

results in a lack of immunoglobulins of all classes and leads to recurrent bacterial infections like otitis, conjunctivitis, dermatitis, sinusitis in the first few years of life, or even some patients present overwhelming sepsis or meningitis, resulting in

death in a few hours. Treatment in most cases is by infusion of intravenous

immunoglobulin.,

Subcellular Cytoplasm. Cell membrane; Peripheral membrane protein. Nucleus. In steady state, BTK is predominantly cytosolic. Following B-cell receptor (BCR)

engagement by antigen, translocates to the plasma membrane through its PH domain. Plasma membrane localization is a critical step in the activation of BTK. A fraction of BTK also shuttles between the nucleus and the cytoplasm, and

nuclear export is mediated by the nuclear export receptor CRM1.

**Expression :** Predominantly expressed in B-lymphocytes.

Tag: orthogonal

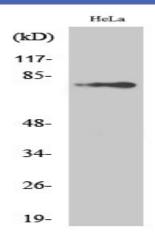
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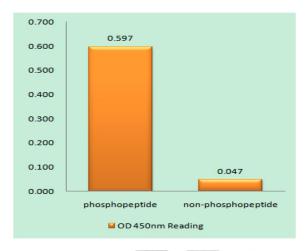
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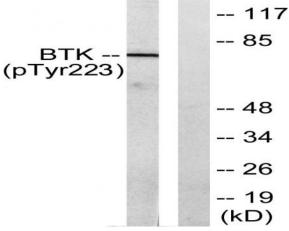
## **Products Images**



Western Blot analysis of various cells using Phospho-Btk (Y223) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using BTK (Phospho-Tyr223) Antibody



Western blot analysis of lysates from HeLa cells treated with Serum 10% 15', using BTK (Phospho-Tyr223) Antibody. The lane on the right is blocked with the phospho peptide.