

Basic Information

Product Name	Anti-BTK (Phospho-Y223) Antibody
Gene Name	BTK
Source	Rabbit
Isotype	IgG
Species Reactivity	human
Tested Application	WB
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Immunogen	A synthesized peptide derived from human Phospho-BTK (Y223)
concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	76KD
Dilution Ratios	Western blot (WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C 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.

Selected Validation Data

Western blot analysis of Phospho-BTK (Y223) expression in Raji cell lysate treated with pervanadate.

