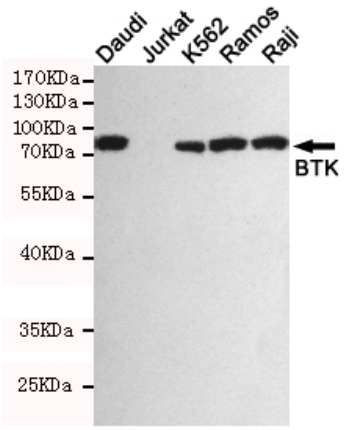
BTK mouse mAb

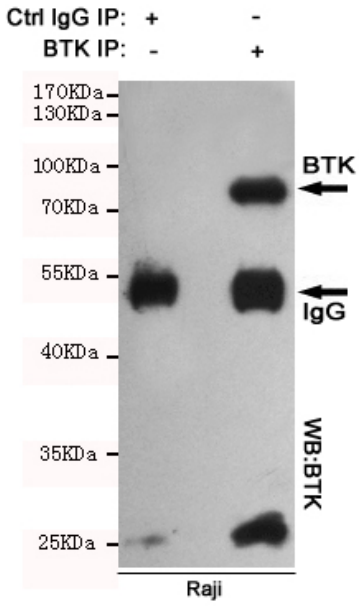
Catalog No	YP-Ab-14218
Isotype	IgG
Reactivity	Human
Applications	WB;IP
Gene Name	btk
Immunogen	Purified recombinant human BTK protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of BTK and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:1000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	BTK;Agammaglobulinaemia tyrosine kinase;AGMX 1;AGMX1;AT;ATK;B cell progenitor kinase;B-cell progenitor kinase;BPK;Bruton agammaglobulinemia tyrosine kinase;Bruton tyrosine kinase;Bruton's Tyrosine Kinase;BTK_HUMAN; IMD 1;IMD1;MGC126261;MGC126262;OTTHUMP00000063593;PSCTK 1; PSCTK1;Tyrosine protein kinase BTK;Tyrosine-protein kinase BTK;XLA
Observed Band	77kD
Calculated Molecular Weight	77kD
Cell Pathway	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.
Tissue Specificity	Predominantly expressed in B-lymphocytes.
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.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot detection of BTK in Daudi,Jurkat(BTK negative),K562,Ramos and Raji cell lysates using BTK mouse mAb (1:1000 diluted).Predicted band size:77KDa.Observed band size:77KDa.



Immunoprecipitation analysis of Raji cell lysates using BTK mouse mAb.