BTK Antibody

Catalog No: #32321

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	BTK Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total BTK protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human BTK.
Target Name	BTK
Other Names	AGMX1; AT; ATK; BPK; IMD1
Accession No.	Swiss-Prot:Q06187NCBI Gene ID:695
SDS-PAGE MW	76KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

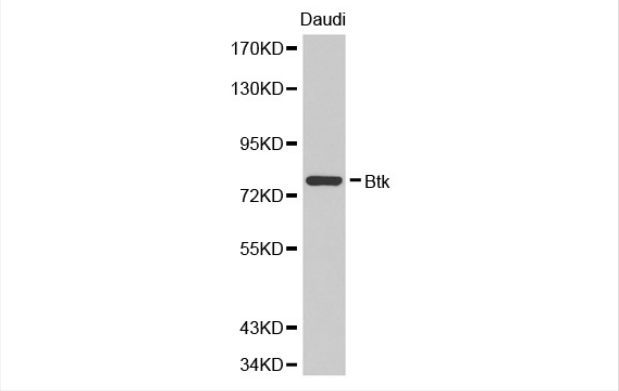
Application Details

Western blotting: 1:500 - 1:2000

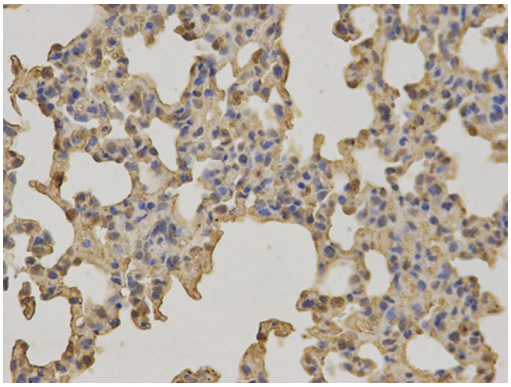
Immunohistochemistry: 1:50 - 1:100

Immunofluorescence: 1:50 - 1:100

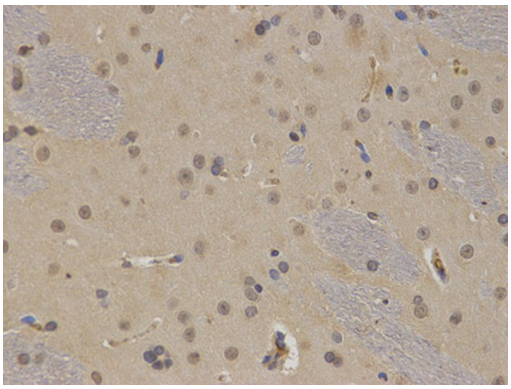
Images



Western blot analysis of extracts of Daudi cell lines, using BTK antibody.



Immunohistochemical analysis of paraffin-embedded rat lung using BTK antibody at dilution of 1:100 (400x lens).



Immunohistochemical analysis of paraffin-embedded rat brain using BTK antibody at dilution of 1:100 (400x lens).

Background

Bruton's tyrosine kinase (Btk) is a member of the Btk/Tec family of cytoplasmic tyrosine kinases. Like other Btk family members, it contains a pleckstrin homology (PH) domain and Src homology SH3 and SH2 domains. Btk plays an important role in B cell development (1,2). Activation of B cells by various ligands is accompanied by Btk membrane translocation mediated by its PH domain binding to phosphatidylinositol-3,4,5-trisphosphate (3-5). The membrane-localized Btk is active and associated with transient phosphorylation of two tyrosine residues, Tyr551 and Tyr223. Tyr551 in the activation loop is transphosphorylated by the Src family tyrosine kinases, leading to autophosphorylation at Tyr223 within the SH3 domain, which is necessary for full activation (6,7). The activation of Btk is negatively regulated by PKCβ through phosphorylation of Btk at Ser180, which results in reduced membrane recruitment, transphosphorylation, and subsequent activation (8). The PKC inhibitory signal is likely to be a key determinant of the B cell receptor signaling threshold to maintain optimal Btk activity (8).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.