

Datasheet for ABIN750098 anti-BTK antibody (AA 581-659)

1 Publication



Overview

Quantity:	100 μL
Target:	BTK
Binding Specificity:	AA 581-659
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BTK antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))
Product Details	
Immunogen:	KLH conjugated synthetic peptide derived from human BTK
Isotype:	IgG
Cross-Reactivity:	Rat
Predicted Reactivity:	Human,Mouse,Dog,Cow,Pig,Horse,Rabbit
Purification:	Purified by Protein A.
Target Details	
Target:	BTK

Target Details

Alternative Name:	BTK (BTK Products)
Background:	Synonyms: 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, BTK_HUMAN, IMD 1, IMD1, MGC126261,
	MGC126262, OTTHUMP00000063593, PSCTK 1, PSCTK1, Tyrosine protein kinase BTK,
	Tyrosine-protein kinase BTK, XLA.
	Background: Brutons 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, Src homology SH3 and SH2 domains. BTK plays an important role in B cell
	development. 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.
	The membrane located 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 kinase, leading to autophosphorylation at Tyr223 within the SH3 domain
	which is necessary for full activation. The activation of BTK is negatively regulated by PKC beta
	through phosphorylation of BTK at Ser180, which results in reduced membrane recruitment,
	transphosphorylation and subsequent activation. The PKC/BTK inhibitory signal is likely to be a
	key determinant of the B cell receptor signaling threshold to maintain optimal BTK activity.
Gene ID:	695
Pathways:	Fc-epsilon Receptor Signaling Pathway, Hormone Transport, Activation of Innate immune
	Response, Regulation of Leukocyte Mediated Immunity, Production of Molecular Mediator of
	Immune Response, Toll-Like Receptors Cascades, BCR Signaling
Application Details	
Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months
Publications	
Product cited in:	Liu, Zhang, Han, Wang, Liu, Zhang, Zhou, Xiang: "Inhibition of BTK protects lungs from trauma-hemorrhagic shock-induced injury in rats." in: Molecular medicine reports , Vol. 16, Issue 1, pp. 192-200, (2017) (PubMed).