

BTK (Ab-222) Conjugated Antibody

Catalog No: #C33121



Package Size: #C33121-AF350 100ul #C33121-AF405 100ul #C33121-AF488 100ul
 #C33121-AF555 100ul #C33121-AF594 100ul #C33121-AF647 100ul
 #C33121-AF680 100ul #C33121-AF750 100ul #C33121-Biotin 100ul

Orders: order@signalwayantibody.com
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Description

Product Name	BTK (Ab-222) Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total BTK protein.
Immunogen Description	Synthesized non-phosphopeptide derived from human BTK around the phosphorylation site of tyrosine 222 (A-L-Y(p)-D-Y).
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	AGMX1;ATK;Agammaglobulinaemia tyrosine kinase;B cell progenitor kinase;BPK
Accession No.	Swiss-Prot#:Q06187NCBI Gene ID:695
Uniprot	Q06187
GeneID	695;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	80
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250
 AF405 conjugated: most applications: 1: 50 - 1: 250
 AF488 conjugated: most applications: 1: 50 - 1: 250
 AF555 conjugated: most applications: 1: 50 - 1: 250
 AF594 conjugated: most applications: 1: 50 - 1: 250
 AF647 conjugated: most applications: 1: 50 - 1: 250
 AF680 conjugated: most applications: 1: 50 - 1: 250
 AF750 conjugated: most applications: 1: 50 - 1: 250

Product Description

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Background

Non-receptor tyrosine kinase indispensable for B lymphocyte development, differentiation and signaling. Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation. After BCR engagement and activation at the plasma membrane, phosphorylates PLCG2 at several sites, igniting the downstream signaling pathway through calcium mobilization, followed by activation of the protein kinase C (PKC) family members. PLCG2 phosphorylation is performed in close cooperation with the adapter protein B-cell linker protein BLNK. BTK acts as a platform to bring together a diverse array of signaling proteins and is implicated in cytokine receptor signaling pathways. Plays an important role in the function of immune cells of innate as well as adaptive immunity, as a component of the Toll-like receptors (TLR) pathway. The TLR pathway acts as a primary surveillance system for the detection of pathogens and are crucial to the activation of host defense. Especially, is a critical molecule in regulating TLR9 activation in splenic B-cells. Within the TLR pathway, induces tyrosine phosphorylation of TIRAP which leads to TIRAP degradation. BTK plays also a critical role in transcription regulation. Induces the activity of NF-kappa-B, which is involved in regulating the expression of hundreds of genes. BTK is involved on the signaling pathway linking TLR8 and TLR9 to NF-kappa-B. Transiently phosphorylates transcription factor GTF2I on tyrosine residues in response to BCR. GTF2I then translocates to the nucleus to bind regulatory enhancer elements to modulate gene expression. ARID3A and NFAT are other transcriptional target of BTK. BTK is required for the formation of functional ARID3A DNA-binding complexes. There is however no evidence that BTK itself binds directly to DNA. BTK has a dual role in the regulation of apoptosis.

Note: This product is for in vitro research use only