bs-3055R **[Primary Antibody]**

phospho-Btk (Ser180) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 695 **SWISS:** Q06187

Target: Btk (Ser180)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human Btk around the phosphorylation site of Ser180: GS(p-S)HR.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

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.

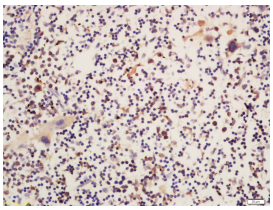
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)

Reactivity: Mouse (predicted: Human, Rat, Rabbit, Pig, Cow, Dog, Horse)

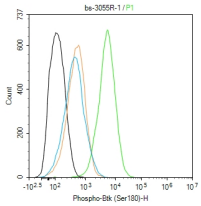
Predicted MW.: 72 kDa

Subcellular Location: Cell membrane ,Cytoplasm ,Nucleus

VALIDATION IMAGES



Tissue/cell: mouse spleen tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Phospho-Btk (Ser180) Polyclonal Antibody, Unconjugated(bs-3055R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control:RAW264.7. Primary Antibody (green line): Rabbit Anti-Phospho-Btk (Ser180) antibody (bs-3055R) Dilution: 1ug/Test; Secondary Antibody (white blue line) : Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control（orange line）： Normal Rabbit IgG Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=1.69]** Liu, Xinwei, et al. "Inhibition of BTK protects lungs from trauma-hemorrhagic shock-induced injury in rats." Molecular Medicine Reports 16.1 (2017): 192-200. WB ;="Rat". 28487990