

## 12-4029: Phospho-Btk (Tyr223) (Clone: B4) rabbit mAb

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	BtkY223-B4
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human, Mouse
<b>Conjugate :</b>	Unconjugated
<b>Format :</b>	Purified
<b>Alternative Name :</b>	Bruton tyrosine kinase, Tyrosine-protein kinase BTK, Agammaglobulinemia tyrosine kinase, ATK, AGMX1, B-cell progenitor kinase, BPK
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phospho-peptide corresponding to residues surrounding Tyr223 of human phospho Btk

### Description

Btk is a major node in the B-cell receptor signaling pathway, where it regulates B cell maturation, activation, survival, differentiation, and proliferation. Btk is activated by Src family kinases, including Lyn, which phosphorylates Btk at Tyr551. Upon phosphorylation at this site, Btk is recruited to the plasma membrane where autophosphorylation at Tyr223 occurs. The Btk signaling pathway is a major target of small molecule inhibitors for B-cell lymphoma, autoimmune diseases, and non-Hodgkin's lymphomas. These inhibitors either form a covalent bond at Cys481 in the ATP-binding site or serve as reversible inhibitors that bind the SH3 pocket and stabilize inactive Btk.

### Product Info

<b>Amount :</b>	20 $\mu$ l / 200 $\mu$ l
<b>Content :</b>	1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA
<b>Storage condition :</b>	Store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

1  $\mu$ g/mL - 0.001  $\mu$ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml)

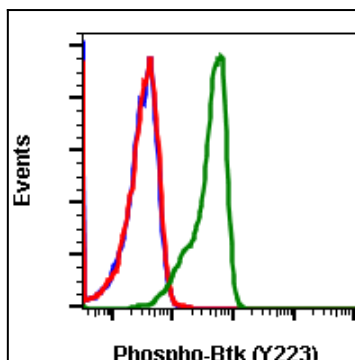


Fig-1: Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN $\alpha$  IL4 and PV (green) using 5 ng/mL of Phospho-Btk (Tyr223) antibody BtkY223-B4.

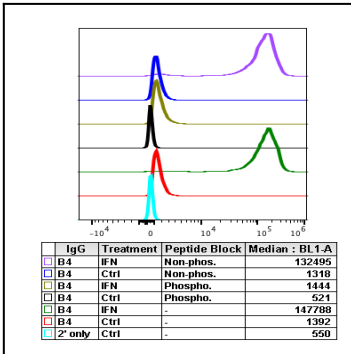


Fig 2 : Peptide blocking flow cytometric analysis of U937 cells secondary antibody only negative control (light blue) or untreated (red) or IFN $\alpha$  + IL4 + pervanadate-treated (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) Phospho-Btk (Tyr223) antibody BtkY223-B4 at 0.025 $\mu$ g/mL.

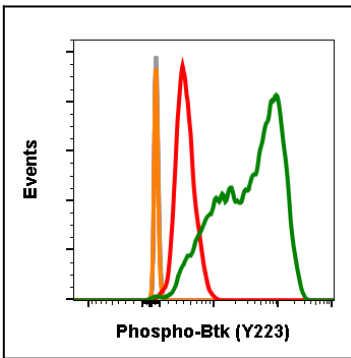


Fig-3: Flow cytometric analysis of 3T3 cells secondary antibody only negative control (blue) or untreated (grey) or treated with IFN $\alpha$  + IL4 + pervanadate (orange) using 0.05  $\mu$ g/mL isotype control or untreated (red) or treated (green) using Phospho-Btk (Tyr223) antibody BtkY223-B4 at 0.05 $\mu$ g/mL.