

Product Data Sheet: Purified anti-phospho-Btk (Tyr223) rabbit mAb

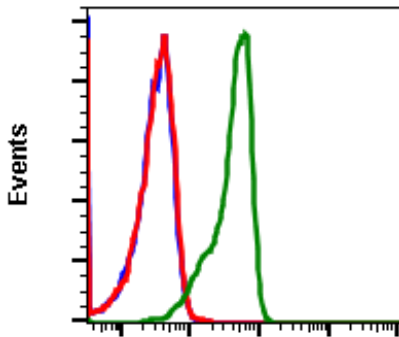
Catalog Number:	1171
Clone:	BtkY223-B4
Isotype:	Rabbit IgG1κ
Immunogen:	A synthetic phospho-peptide corresponding to residues surrounding Tyr223 of human phospho Btk
Reactivity:	Mouse, Human
Cross Reactivity:	Predicted to work with mouse, rat and other homologues.
Preparation:	Protein A+G
Formulation:	1X PBS, 0.02% NaN ₃ , 50% Glycerol, 0.1% BSA
Applications:	Flow Cytometry
Recommended Usage:	1.0 - 0.1 µg/ml. Optimum concentration should be determined by the user.
Product Configuration:	200 ul (0.5mg/ml)
Detection:	Anti-Rabbit IgG

Description

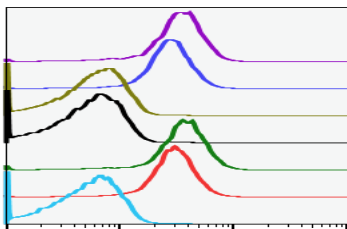
Bruton's tyrosine kinase (Btk) plays a major role in B cell development. B cell activation by various ligands is accompanied by Btk membrane translocation, where transient phosphorylation at two sites, Tyr551 and Tyr223 create phospho Btk. Tyr551, in the activation loop, is transphosphorylated by the Src family of tyrosine kinases, leading to autophosphorylation at Tyr223. Tyr223 phosphorylation facilitates phospho Btk interaction with activated Syk. Defects in Btk are the cause of X-linked agammaglobulinemia (XLA); also known as X-linked agammaglobulinemia type 1 (AGMX1) or immunodeficiency type 1 (IMD1).

References

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2. Lewis CM, et al. (2001) Curr. Opin. Immunol. 13: 317-25.
3. Salim K, et al. (1996) EMBO J. 15: 6241-50.
4. Rameh LE, et al. (1997) J. Biol. Chem. 272: 22059-66.
5. Várnai P, et al. (1999) J. Biol. Chem. 274: 10983-9.
6. Rawlings, D.J. et al. (1996) Science 271: 822-5.
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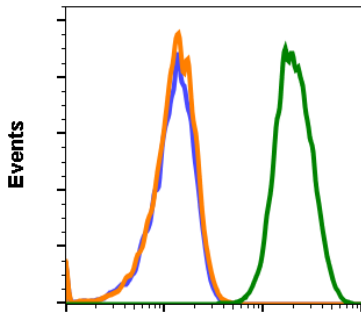
Purified anti-phospho-Btk (Tyr223) rabbit mAb Images

Phospho-Btk (Y223)

Flow cytometric analysis of U937 cells, secondary antibody only negative control (blue) or untreated (red) or treated with IFN α , IL4 and PV (green) using 5 ng/mL of Phospho-Btk (Tyr223) antibody BtkY223-B4 Cat. #1171.



Peptide blocking flow cytometric analysis of U937 cells, secondary antibody only negative control (light blue) or untreated (red) or IFN α /IL4-treated (green) or untreated and blocked with phospho-peptide (black) or IFN α /IL4 and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or IFN α /IL4 and blocked with non-phospho peptide (purple) Phospho-Btk (Tyr223) antibody BtkY223-B4 at 0.05 μ g/mL. Cat. #1171.

SampleID	Median : BL1-A
IL4 B4 N	3338
Ctrl B4 N	2722
IL4 B4 P	557
Ctrl B4 P	511
IL4 B4	3601
Ctrl B4	2951
Ctrl 2' only	465


Phospho-Btk (Y223)

BtkY223-B4 recognizes basal phosphorylation levels in mouse cells. Flow cytometric analysis of NIH3T3 cells, secondary antibody only (blue) or 0.1 μ g/mL of isotype control Cat. #2141 (orange) or of Phospho-Btk (Tyr223) antibody BtkY223-B4 (green) Cat. #1171.