

Monoclonal Antibody to BTK

Cat. #: Mab-607075

Description:

Bruton's tyrosine kinase (BTK) is a member of the BTK/ Tec family of cytoplasmic tyrosine kinases. All members of the family contain SH3 and SH2 domains and, with the exception of Txk and Dsrc28C, also contain a pleckstrin homology (PH) and a Tec homology (TH) domain in their amino termini. 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.

Immunogen/Specificity:

Ni-NTA purified truncated recombinant BTK expressed in E. Coli strain BL21 (DE3)

Applications :

Western Blot: 1: 500- 1: 2,000

IHC(P): 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Crude ascites.

Reference:

1. Yamada, N., et al. Biochem. Biophys. Res. Commun. 192: 231-240.
2. Thomas, J.D., et al. 1993. Science. 261: 355-358.
3. Tamagnone, L., et al. Oncogene 9: 3683-3688.

Clone Number: 7F12H4

Isotype: IgG1

Species: Human

Storage and Stability: stored at -20 C

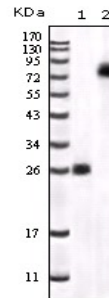
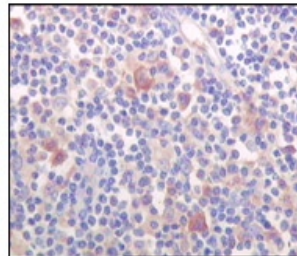
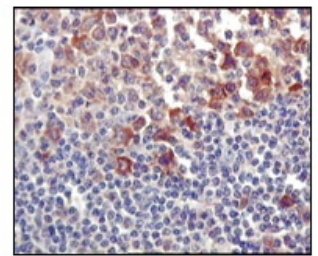


Figure 1: Western blot analysis using anti-human BTK monoclonal antibody against truncated BTK recombinant protein (1), K562 cell lysates (2).



Human lymph-node tissue



Human lymph follicle tissue

Figure 2: Immunohistochemical analysis of paraffin-embedded human lymph-node/ follicles tissue, showing cytoplasmic & membrane localization using BTK antibody with DAB staining

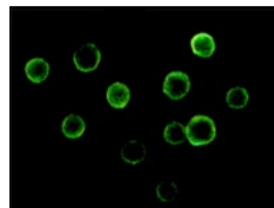


Figure 1: Immunofluorescence analysis of Jurkat cells using BTK monoclonal antibody with FITC-IgG.