abcam

Product datasheet

FITC Anti-BTK (phospho Y551) antibody [BtkY551-G12] ab278613



2 Images

Overview

Product name FITC Anti-BTK (phospho Y551) antibody [BtkY551-G12]

Description FITC Rabbit monoclonal [BtkY551-G12] to BTK (phospho Y551)

Host species Rabbit

Conjugation FITC. Ex: 493nm, Em: 528nm

Tested applications Suitable for: Flow Cyt
Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human BTK (phospho Y551). The exact immunogen sequence used to

generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support

team to discuss your requirements.

Database link: Q06187

Run BLAST with
Run BLAST with

Positive control Flow cyt: Ramos cells treated with pervanadate.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificityLong-term security of supplyAnimal-free production

For more information see here.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Store In the Dark.

Storage buffer Preservative: 0.09% Sodium azide

Constituents: 99.71% PBS, 0.2% BSA

Purity Protein A/G purified

Clonality Monoclonal

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Clone number BtkY551-G12

Isotype IgG

Light chain type kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab278613 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 5µl for 10 ⁶ cells.

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П	a	ra	Δt

Function

Plays a crucial role in B-cell ontogeny. Transiently phosphorylates GTF2I on tyrosine residues in response to B-cell receptor cross-linking. Required for the formation of functional ARID3A DNA-binding complexes.

Involvement in disease

Defects in BTK are the cause of X-linked agammaglobulinemia (XLA) [MIM:300755]; also known as X-linked agammaglobulinemia type 1 (AGMX1) or immunodeficiency type 1 (IMD1). XLA is a humoral immunodeficiency disease which results in developmental defects in the maturation pathway of B-cells. Affected boys have normal levels of pre-B-cells in their bone marrow but virtually no circulating mature B-lymphocytes. This results in a lack of immunoglobulins of all classes and leads to recurrent bacterial infections like otitis, conjunctivitis, dermatitis, sinusitis in the first few years of life, or even some patients present overwhelming sepsis or meningitis, resulting in death in a few hours. Treatment in most cases is by infusion of intravenous immunoglobulin.

Defects in BTK may be the cause of X-linked hypogammaglobulinemia and isolated growth hormone deficiency (XLA-IGHD) [MIM:307200]; also known as agammaglobulinemia and isolated growth hormone deficiency or Fleisher syndrome or isolated growth hormone deficiency type 3 (IGHD3). In rare cases XLA is inherited together with isolated growth hormone deficiency (IGHD).

Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. TEC subfamily.

Contains 1 Btk-type zinc finger.

Contains 1 PH domain.

Contains 1 protein kinase domain.

Contains 1 SH2 domain. Contains 1 SH3 domain.

Post-translational modifications

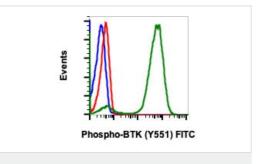
Autophosphorylated on Tyr-223 and Tyr-551. Phosphorylation of Tyr-223 may create a docking

site for a SH2 containing protein.

Cellular localization

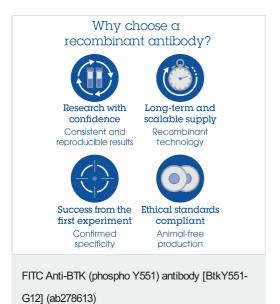
Cytoplasm. Membrane. Nucleus.

Images



Flow Cytometry - FITC Anti-BTK (phospho Y551) antibody [BtkY551-G12] (ab278613)

Flow cytometric analysis of Ramos cells unstained and untreated as negative control (blue) or untreated (red) or treated with pervanadate (green) and stained using ab278613.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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