

Product datasheet

Anti-BTK antibody [10D11] ab254141

Recombinant

[1 References](#) [2 Images](#)

Overview

Product name	Anti-BTK antibody [10D11]
Description	Mouse monoclonal [10D11] to BTK
Host species	Mouse
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Raji, Ramos, K562 and NAMALWA whole cell lysates.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59.94% PBS, 0.05% BSA, 40% Glycerol
Purity	Protein A purified
Clonality	Monoclonal
Clone number	10D11
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab254141 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
WB		1/1000. Detects a band of approximately 76 kDa (predicted molecular weight: 76 kDa).

Application notes Is unsuitable for Flow Cyt, IHC-P or IP.

Target

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.

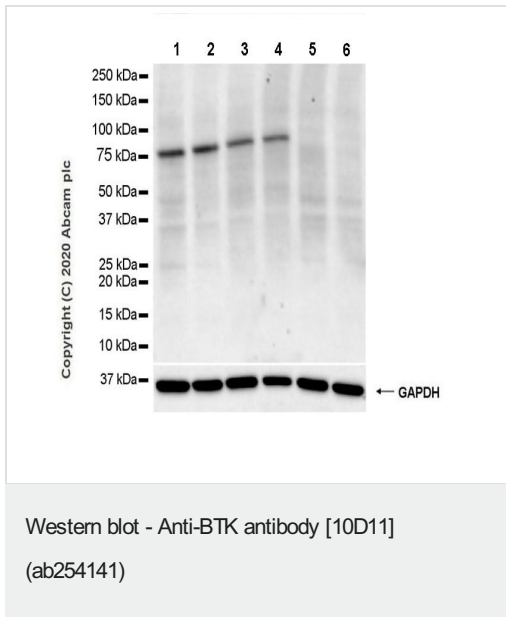
Defects in BTK may be the cause of X-linked hypogammaglobulinemia and isolated growth hormone deficiency (XLA-IGHD) [MIM:307200]; also known as agammaglobulinemia and isolated growth hormone deficiency or Fleisher syndrome or isolated growth hormone deficiency type 3 (IGHD3). In rare cases XLA is inherited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



All lanes : Anti-BTK antibody [10D11] (ab254141) at 1/1000 dilution

Lane 1 : Raji (human Burkitt's lymphoma B lymphocyte), whole cell lysate

Lane 2 : Ramos (human Burkitt's lymphoma B lymphocyte), whole cell lysate

Lane 3 : NAMALWA (human Burkitt's lymphoma B lymphocyte), whole cell lysate

Lane 4 : K562 (human chronic myelogenous leukemia lymphoblast), whole cell lysate

Lane 5 : Jurkat (human T cell leukemia T lymphocyte), whole cell lysate

Lane 6 : MOLT-4 (human lymphoblastic leukemia T lymphoblast), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/100000 dilution

Predicted band size: 76 kDa

Observed band size: 76 kDa

Exposure time: 114 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

This blot was developed using a higher sensitivity ECL substrate.

Negative control: Jurkat, MOLT-4 (PMID 24759210).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-BTK antibody [10D11] (ab254141)

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

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