

Anti-BTK (phospho Y551) antibody [EP267Y] ab40770

リコンビナント **RabMAb**

6 References 画像数 6

製品の概要

製品名	Anti-BTK (phospho Y551) antibody [EP267Y]
製品の詳細	Rabbit monoclonal [EP267Y] to BTK (phospho Y551)
由来種	Rabbit
特異性	<i>Stimulation may be required to allow detection of the phosphorylated protein. Please see images below for recommended treatment conditions and positive controls.</i> ab40770 also reacts with family proteins including BMX (phospho Y566), ITK (phospho Y512), TEC (phospho Y519) and TXK (phospho Y420).
アプリケーション	適用あり: ICC/IF, Indirect ELISA, WB, Dot blot 適用なし: Flow Cyt, IHC or IP
種交差性	交差種: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Ramos treated with 1mM pervanadate whole cell lysates, K-562 treated with 1mM pervanadate whole cell lysate ICC/IF: Ramos cells
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <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 For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	pH: 7.20

	Preservative: 0.01% Sodium azide
	Constituents: 50% Glycerol (glycerin, glycerine), 0.05% BSA, 49% PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP267Y
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab40770の使用に適用されます**
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/500.
Indirect ELISA		Use at an assay dependent concentration.
WB		1/2000. Detects a band of approximately 74 kDa (predicted molecular weight: 74 kDa).
Dot blot		1/1000.

追加情報 Is unsuitable for Flow Cyt, IHC or IP.

ターゲット情報

機能	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.
関連疾患	<p>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.</p> <p>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).</p>
配列類似性	<p>Belongs to the protein kinase superfamily. Tyr protein kinase family. TEC subfamily.</p> <p>Contains 1 Btk-type zinc finger.</p> <p>Contains 1 PH domain.</p> <p>Contains 1 protein kinase domain.</p> <p>Contains 1 SH2 domain.</p>

翻訳後修飾

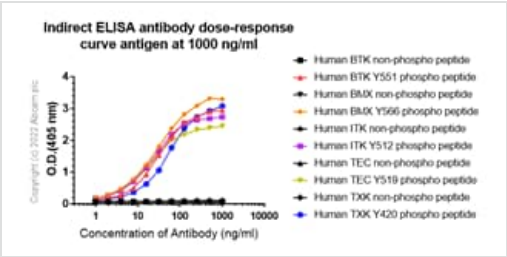
細胞内局在

Contains 1 SH3 domain.

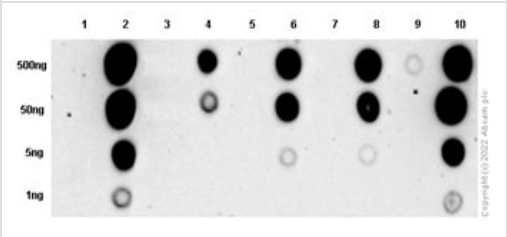
Autophosphorylated on Tyr-223 and Tyr-551. Phosphorylation of Tyr-223 may create a docking site for a SH2 containing protein.

Cytoplasm. Membrane. Nucleus.

画像



Indirect ELISA - Anti-BTK (phospho Y551) antibody [EP267Y] (ab40770)



Dot Blot - Anti-BTK (phospho Y551) antibody [EP267Y] (ab40770)

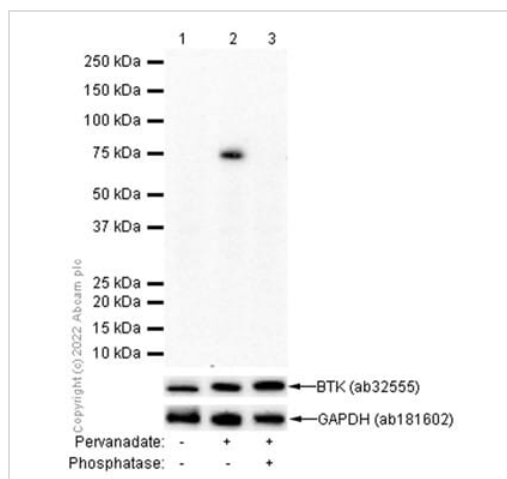
ELISA using ab40770 at varying antibody concentrations and antigen concentration of 1000 ng/ml. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) (1/2500) was used as the secondary antibody. Substrate solution was p-nitrophenyl phosphate (PNPP).

Dot blot analysis of Human BTK non-phospho peptide (lane 1), Human BTK Y551 phospho peptide (lane 2), Human BMX non-phospho peptide (lane 3), Human BMX Y566 phospho peptide (lane 4), Human ITK non-phospho peptide (lane 5), Human ITK Y512 phospho peptide (lane 6), Human TEC non-phospho peptide (lane 7), Human TEC Y519 phospho peptide (lane 8), Human TXK non-phospho peptide (lane 9) and Human TXK Y420 phospho peptide (lane 10) with ab40770 at a dilution of 1/1000. **ab97051** Peroxidase conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody at a dilution of 1/20,000.

Blocking buffer and concentration : 5% NFDM/TBST

Diluting buffer and concentration : 5% NFDM/TBST

Exposure time: 180 seconds



Western blot - Anti-BTK (phospho Y551) antibody [EP267Y] (ab40770)

All lanes : Anti-BTK (phospho Y551) antibody [EP267Y] (ab40770) at 1/1000 dilution

Lane 1 : Untreated K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 2 : K-562 treated with 1mM pervanadate for 30 min whole cell lysate

Lane 3 : K-562 treated with 1mM pervanadate for 30 min whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

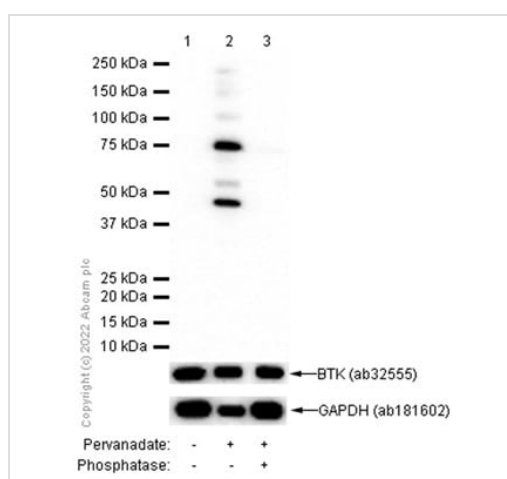
Predicted band size: 74 kDa

Observed band size: 75 kDa

Exposure time: 180 seconds

Blocking buffer and concentration : 5% NFDM/TBST

Diluting buffer and concentration : 5% NFDM/TBST



Western blot - Anti-BTK (phospho Y551) antibody [EP267Y] (ab40770)

All lanes : Anti-BTK (phospho Y551) antibody [EP267Y] (ab40770) at 1/1000 dilution

Lane 1 : Untreated Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lane 2 : Ramos treated with 1mM pervanadate for 30 min whole cell lysate

Lane 3 : Ramos treated with 1mM pervanadate for 30 min whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

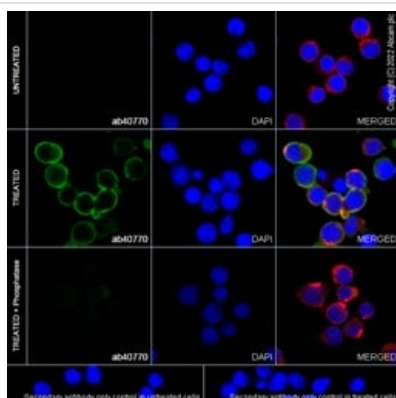
Predicted band size: 74 kDa

Observed band size: 75 kDa

Exposure time: 7 seconds

Blocking buffer and concentration : 5% NFDM/TBST

Diluting buffer and concentration : 5% NFDM/TBST



Immunocytochemistry/ Immunofluorescence - Anti-BTK (phospho Y551) antibody [EP267Y] (ab40770)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Ramos (human Burkitt's lymphoma B lymphocyte) cells labelling BTK with primary antibody anti- BTK (phospho Y551) (ab40770) at 1/200 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150081](#)) secondary antibody at 1/1000 dilution (2.0 µg/mL). Confocal image showing increased cytoplasmic staining in Ramos cells treated with pervanadate (1 mM) for 30 min and then the signal decreased after Alkaline Phosphatase treatment 37°C for 1 hour. Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) ([ab195889](#)) was used to counterstain tubulin at 1/200 dilution (2.5 µg/mL). The nuclear counter stain is DAPI (blue).

The secondary antibody only control is : Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (2.0 µg/mL).

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 (phospho Y551) antibody [EP267Y]
(ab40770)

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