

# Anti-BLK (pY389) Antibody

Rabbit polyclonal antibody to BLK (pY389) Catalog # AP60900

#### **Product Information**

Application WB
Primary Accession P16277

Other Accession P16277

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 57706

### **Additional Information**

Gene ID 640

**Other Names** Tyrosine-protein kinase Blk; B lymphocyte kinase; p55-Blk

**Target/Specificity** Recognizes endogenous levels of BLK (pY389) protein.

**Dilution** WB~~WB (1/500 - 1/1000)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name BLK

**Function** Non-receptor tyrosine kinase involved in B-lymphocyte development,

differentiation and signaling (By similarity). B-cell receptor (BCR) signaling

requires a tight regulation of several protein tyrosine kinases and

phosphatases, and associated coreceptors (By similarity). Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation (By similarity). Signaling through BLK plays an important role in transmitting signals through surface immunoglobulins and supports the pro-B to pre-B transition, as well as the signaling for growth arrest and apoptosis downstream of B-cell receptor (By similarity). Specifically binds and phosphorylates CD79A at 'Tyr-188'and 'Tyr-199', as well as CD79B at 'Tyr-196' and 'Tyr-207' (By similarity). Also phosphorylates the immunoglobulin G receptors FCGR2A, FCGR2B and FCGR2C (PubMed:8756631). With FYN and LYN, plays an essential role in pre-B- cell receptor (pre-BCR)-mediated NF-kappa-B activation (By similarity). Also contributes to BTK activation by indirectly stimulating BTK intramolecular autophosphorylation (By similarity).

In pancreatic islets, acts as a modulator of beta-cells function through the upregulation of PDX1 and NKX6-1 and consequent stimulation of insulin secretion in response to glucose (PubMed:<u>19667185</u>). Phosphorylates CGAS, promoting retention of CGAS in the cytosol (PubMed:<u>30356214</u>).

**Cellular Location** Cell membrane; Lipid-anchor. Note=Present and active in lipid rafts.

Membrane location is required for the phosphorylation of CD79A and CD79B

(By similarity).

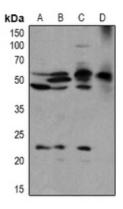
**Tissue Location** Expressed in lymphatic organs, pancreatic islets, Leydig cells, striate ducts of

salivary glands and hair follicles

## **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human BLK. The exact sequence is proprietary.

## **Images**



Western blot analysis of BLK (pY389) expression in HEK293T (A), PANC1 (B), CT26 (C), rat spleen (D) whole cell lysates.

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