

## Recombinant Human BLK Protein (G2-P505), Tag Free

Cat. No. BLK-0745H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human GG-Blk(G2-P505 end) Protein was expressed in Insect cell.

**Species** Human

**Source** Insect Cells

**ProteinLength** G2-P505

#### Description

Non-receptor tyrosine kinase involved in B-lymphocyte development, differentiation and signaling. B-cell receptor (BCR) signaling requires a tight regulation of several protein tyrosine kinases and phosphatases, and associated coreceptors. Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation. 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. Specifically binds and phosphorylates CD79A at 'Tyr-188' and 'Tyr-199', as well as CD79B at 'Tyr-196' and 'Tyr-207'. Phosphorylates also the immunoglobulin G receptors FCGR2A, FCGR2B and FCGR2C. With FYN and LYN, plays an essential role in pre-B-cell receptor (pre-BCR)-mediated NF-kappa-B activation. Contributes also to BTK activation by indirectly stimulating BTK intramolecular autophosphorylation. In pancreatic islets, acts as a modulator of beta-cells function through the up-regulation of PDX1 and NKX6-1 and consequent stimulation of insulin secretion in response to glucose. Phosphorylates CGAS, promoting retention of CGAS in the cytosol.

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<b>Form</b>	Liquid
<b>Endotoxin</b>	< 0.01 EU per µg of the protein
<b>Purity</b>	90%
<b>Stability</b>	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade.
<b>Storage</b>	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Storage Buffer</b>	Supplied as sterile 50 mM Tris-HCl (pH7.5), 200 mM NaCl, 20% glycerol
<b>Shipping</b>	It is shipped out with blue ice.

## GENE INFORMATION

<b>Gene Name</b>	BLK B lymphoid tyrosine kinase [ Homo sapiens (human) ]
<b>Official Symbol</b>	BLK
<b>Synonyms</b>	BLK; B lymphoid tyrosine kinase; tyrosine-protein kinase Blk; MGC10442; p55-Blk; b lymphocyte kinase; BLK nonreceptor tyrosine kinase; MODY11;
<b>Gene ID</b>	640
<b>mRNA Refseq</b>	NM_001715
<b>Protein Refseq</b>	NP_001706

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<b>MIM</b>	191305
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<b>UniProt ID</b>	P51451
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