

Product name:	Syk (phospho Tyr525) Rabbit Polyclonal Antibody
Cat number:	ABN05499
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human SYK around the phosphorylation site of Tyr525. AA range:491-540
Reactivity:	Human,Mouse,Rat,Monkey
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	72kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the family of non-receptor type Tyr protein kinases. This protein is widely expressed in hematopoietic cells and is involved in coupling activated immunoreceptors to downstream signaling events that mediate diverse cellular responses, including proliferation, differentiation, and phagocytosis. It is thought to be a modulator of epithelial cell growth and a potential tumour suppressor in human breast carcinomas. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010],catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:Positive effector of BCR-stimulated responses. Couples the B-cell antigen receptor (BCR) to the mobilization of calcium ion either through a phosphoinositide 3-kinase-dependent pathway, when not phosphorylated on tyrosines of the linker region, or through a phospholipase C-gamma-dependent pathway, when phosphorylated on Tyr-348 and Tyr-352. Thus the differential phosphorylation of Syk can determine the pathway by which BCR is coupled to the regulation of intracellular calcium ion.,PTM:Autophosphorylated.,PTM:Phosphorylation on Tyr-323 creates a binding site for c-Cbl, an adapter protein that serves as a negative regulator of BCR-stimulated calcium ion signaling.,PTM:Phosphorylation on Tyr-348 and Tyr-352 enhances the phosphorylation and activation of phospholipase C-gamma and the early phase of calcium ion mobilization via a phosphoinositide 3-kinase-independent pathway.,PTM:Ubiquitinated by CBLB after BCR activation; which promotes proteasomal degradation.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 SH2 domains.,subunit:Interacts with CBL and SLA when it is phosphorylated. The interaction with SLA may link it to CBL, leading to its destruction. Interacts with phosphorylated NFAM1 (By similarity). Interacts with Epstein-Barr virus LMP2A. Interacts through its SH2 domains with the phosphorylated ITAM domain of CD79A which stimulates SYK autophosphorylation and activation. Interacts with FCRL3.,