

# Immunotag™ Syk (phospho Tyr352) Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                    |
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| Catalog No.            | ITP0500                                                                                                                                                            |
| Product Description    | Immunotag™ Syk (phospho Tyr352) Polyclonal Antibody                                                                                                                |
| Size                   | 50 µg, 100 µg                                                                                                                                                      |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | SYK (Tyr352)                                                                                                                                                       |
| Clonality              | Polyclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | WB,ELISA                                                                                                                                                           |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.                                                                                |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                    |
| Host Species           | Rabbit                                                                                                                                                             |
| Immunogen              | Synthesized phospho-peptide around the phosphorylation site of human Syk (phospho Tyr352)                                                                          |
| Specificity            | Phospho-Syk (Y352) Polyclonal Antibody detects endogenous levels of Syk protein only when phosphorylated at Y352.                                                  |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                               |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                            |
| Gene Name              | SYK                                                                                                                                                                |
| Accession No.          | P43405 P48025 Q64725                                                                                                                                               |
| Alternate Names        | SYK; Tyrosine-protein kinase SYK; Spleen tyrosine kinase; p72-Syk                                                                                                  |

## Antibody Specification

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| Description                 | spleen associated tyrosine kinase(SYK) Homo sapiens 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],                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Cell Pathway/<br>Category   | Natural killer cell mediated cytotoxicity,B_Cell_Antigen,Fc epsilon RI,Fc gamma R-mediated phagocytosis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Protein<br>Expression       | Eye,Lymph,Ovary,Platelet,Tonsil,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Subcellular<br>Localization | nucleus,cytoplasm,cytosol,plasma membrane,B cell receptor complex,extrinsic component of cytoplasmic side of plasma membrane,early phagosome,T cell receptor complex,protein complex,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Protein Function            | 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., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |