

## Product datasheet for SM3127P

### OriGene Technologies, Inc.

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# SYK (5-360) Mouse Monoclonal Antibody [Clone ID: SYK-01]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: SYK-01

**Applications:** IF, IHC, IP, WB

Recommended Dilution: Immunohistochemistry on Paraffin Sections (5 µg/ml).

**Positive Tissue:** Tonsil B cells. **Immunocytochemistry. Immunoprecipitation.** 

Western blot (1-2 µg/ml, 60 min).

**Positive Control:** RBL rat basophilic leukemia cell line, A-431 human epidermoid carcinoma cell line, RAMOS lymphoma cell line, U-937 human histiocytic lymphoma cell line, JURKAT

human peripheral blood T cell leukemia cell line.

*Negative Control:* HeLa human cervix carcinoma cell line.

**Sample Preparation:** Resuspend approx. 50 mil. cells in 1 ml cold lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate (1:1)

with non-reducing SDS-PAGE sample buffer.

Application note: Non-reducing conditions. SDS-PAGE (12% separating gel).

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Recombinant fragment (aa 5-360) of Human Syk

**Specificity:** The monoclonal *SYK-01* antibody reacts with Protein Tyrosine Kinase p72Syk (Syk; Syk family

tyrosine-specific phospho-transferase), which is required for the transduction of signals

through the B cell antigen receptor (BCR) and the high affinity IgE receptor (FceRI).

Formulation: Phosphate buffered saline (PBS), pH~7.4

State: Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE)

Preservative: 15 mM Sodium Azide

**Concentration:** lot specific



### SYK (5-360) Mouse Monoclonal Antibody [Clone ID: SYK-01] - SM3127P

**Purification:** Affinity Chromatography on Protein A

Conjugation: Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20 °C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Gene Name: spleen tyrosine kinase

Database Link: Entrez Gene 6850 Human

P43405

**Background:** Syk is a cytoplasmic protein tyrosine kinase that translocates to the plasma membrane upon

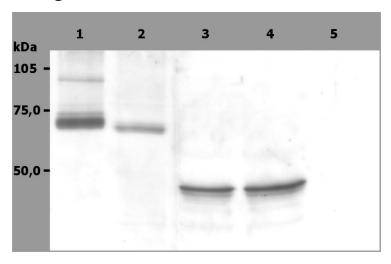
B cell antigen receptor (BCR) or the high-affinity IgE receptor (FceRI) triggering, and

phosphorylates downstream adaptor proteins, thereby providing docking sites for initiation of subsequent signaling pathways, such as calcium mobilization, cytoskeleton remodeling, or transcription of specific genes. Syk binds to the receptor assemblies through interactions of its pair of SH2 domains with ITAM motives of the receptor, which have been phosphorylated by Src-family kinases. These kinases also help to activate Syk by phosphorylation of its

activation loop.

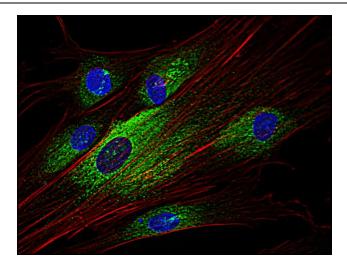
**Synonyms:** Tyrosine-protein kinase SYK, Spleen tyrosine kinase

## **Product images:**

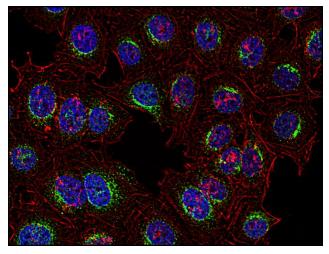


Western Blotting analysis (non-reducing conditions) of whole cell lysate of RAMOS human Burkitt lymphoma cell line (1), RBL rat basophilic leukemia cell line (2) and HeLa human cervix carcinoma cell line (3, 4). Lane 1, 2: immunostaining with anti-Syk (SYK-01) Lane 3, 4: immunostaining with anti-human Cytokeratin 18 (DC-10) Lane 5: negative control





Immunofluorescence staining of Syk in human primary fibroblasts using anti-Syk (SYK-01; green). Actin cytoskeleton was decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).



Immunofluorescence staining of Syk in human HeLa cell line using anti-Syk (SYK-01; green). Actin cytoskeleton was decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).