

BACKGROUND

Spleen tyrosine kinase (Syk) is a non-receptor protein tyrosine kinase expressed in a wide range of hematopoietic cells.¹ Syk has not only been recognized as a key player in both innate and adaptive immunity, but there is also evidence of a role for Syk in non-immune cells and in the maintenance of vascular integrity,² as well as the pathogenesis of malignant cancer.³ Syk contains two SH2 domains in tandem, and multiple auto-phosphorylation sites. Syk is activated upon binding of tandem SH2 domains to the immunoreceptor tyrosine-based activating motif (ITAM) of various types of receptors such as Fc γ R, CR3, Dectin-1, and apoptotic cell-recognizing receptor. Syk is critical for the tyrosine phosphorylation of multiple proteins which regulate important pathways downstream of the receptor, such as Ca²⁺ mobilization, mitogen-activated protein kinase (MAPK) cascades, PI-3 kinase pathway and many other signaling pathways.⁴

References:

1. Nilsson, S. et al: *Physiol Rev* 81:1535-65, 2001.
2. Tremblay, G. B. et al: *Mol Endocrinol.* 11: 353-365, 1997.
3. Mathews, J & Gustafsson, J. A.: *Mol. Interv.* 3:281-92, 2003.
4. Tremblay, A. et al: *Mol Cell* 3, 513-519, 1999.

TECHNICAL INFORMATION

Source:

Affinity purified Phospho-Syk (Tyr525/526) antibody is a rabbit polyclonal antibody raised against the epitope surrounding and including Tyr525 and Tyr526 of human Syk sequence.

Specificity and Sensitivity:

This antibody detects endogenous phospho-human, mouse and rat Syk proteins.

Storage Buffer: PBS and 30% glycerol

Storage:

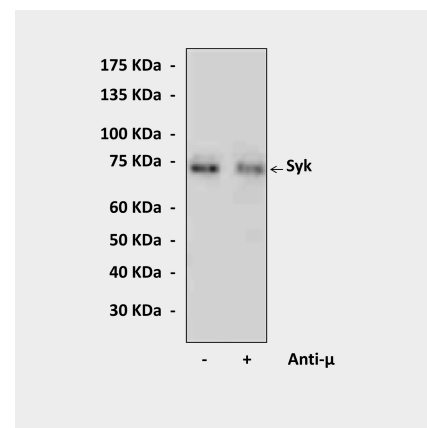
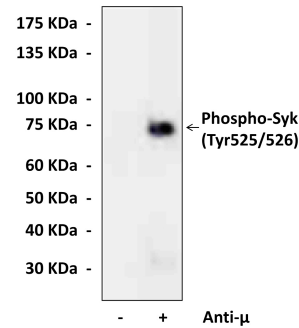
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC (Paraffin)	n/d
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Ramos cells were stimulated with anti-mu antibodies and applied onto Western blot analysis using Phospho-Syk (Tyr525/6) rabbit polyclonal antibody (**Top**), and Syk antibody (**Bottom**).

