

1P-345-C025

Monoclonal Antibody to SIT Phycoerythrin (PE) conjugated (0.025 mg)

Clone:	SIT-01
Isotype:	Mouse IgG1
Specificity:	The antibody SIT-01 reacts with SHP2-interacting transmembrane adaptor protein (SIT) expressed exclusively in lymphoid organs. It weakly crossreacts with mouse SIT.
Regulatory Status:	RUO
Immunogen:	Bacterially produced recombinant intracellular fragment of human SIT.
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Concentration:	0.1 mg/ml
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis (see application note on www.exbio.cz). Suggested working dilution is 1:50. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
Expiration:	See vial label
Lot Number:	See vial label
Background:	SIT (SHP2-interacting transmembrane adaptor protein) is expressed exclusively in lymphoid organs and acts either as a positive or as a negative regulatory element in T cell activation and in T cell development. Binding to Grb2 plays a pivotal role in signal transduction. Hubener et al. (2001) determined that the SIT gene contains 5 exons and spans 1.8 kb of genomic DNA. The SIT promoter demonstrated strong transcriptional activity and potential binding sites for both ubiquitous and lymphoid-specific transcription factors.

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Antibodies

References:

*Simeoni L, Posevitz V, Kolsch U, Meinert I, Bruyns E, Pfeffer K, Reinhold D, Schraven B: The transmembrane adapter protein SIT regulates thymic development and peripheral T-cell functions. *Mol Cell Biol.* 2005 Sep;25(17):7557-68.

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*Marie-Cardine A, Kirchgessner H, Bruyns E, Shevchenko A, Mann M, Autschbach F, Ratnofsky S, Meuer S, Schraven B: SHP2-interacting transmembrane adaptor protein (SIT), a novel disulfide-linked dimer regulating human T cell activation. *J Exp Med.* 1999 Apr 19;189(8):1181-94.

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EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz