

TECHNICAL DATA SHEET

CyFlow™ SIT PE Anti-Hu; Clone SIT-01

REF BJ327694

**For Research Use Only.
Not for use in diagnostic or therapeutic procedures.**

Specifications

Antigen	SIT
Alternative Names	—
Clone	SIT-01
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [0.1 mg/ml]
Immunogen	Bacterially produced recombinant intracellular fragment of human SIT

Specificity

The mouse monoclonal antibody SIT-01 recognizes SIT (SHP2-interacting transmembrane adaptor protein) expressed exclusively in lymphoid organs. It weakly crossreacts with mouse SIT.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 2 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

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.

References

- 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. < PMID: 10209036 >
- Hubener C, Mincheva A, Lichter P, Schraven B, Bruyns E: Complete sequence, genomic organization, and chromosomal localization of the human gene encoding the SHP2-interacting transmembrane adaptor protein (SIT). Immunogenetics. 2001 May-Jun; 53(4):337-41. < PMID: 11491537 >
- Horejsí V, Zhang W, Schraven B: Transmembrane adaptor proteins: organizers of immunoreceptor signalling. Nat Rev Immunol. 2004 Aug; 4(8):603-16. < PMID: 15286727 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Simeoni L, Posevitz V, Kolsch U, Meinert I, Bruyns E, Pfeffer K, Reinhold D, Schraven B: The transmembrane adaptor protein SIT regulates thymic development and peripheral T-cell functions. Mol Cell Biol. 2005 Sep; 25(17):7557-68. < PMID: 16107703 >
- Tedoldi S, Paterson JC, Hansmann ML, Natkunam Y, Rudiger T, Angelisova P, Du MQ, Roberton H, Roncador G, Sanchez L, Pozzobon M, Masir N, Barry R, Pileri S, Mason DY, Marafioti T, Horejsi V: Transmembrane adaptor molecules: a new category of lymphoid-cell markers. Blood. 2006 Jan 1; 107(1):213-21. < PMID: 16160011 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com