

Mouse anti-Human SIRL-1 Monoclonal Antibody | anti-SIRL-1 antibody

SIRL-1, Human, mAb 1A5

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA77808	Mouse	Human	Western Blot, Immunoprecipitation, Functional Assay, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

SIRL-1; Monoclonal Antibody; Human; mAb 1A5; V-set and transmembrane domain-containing protein 1; Signal inhibitory receptor on leukocytes-1; anti-SIRL-1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	1A5
Purity/Purification	Protein G
Form/Format	0.2 um filtered in PBS+0.1%BSA For unit size 0.5 mg or larger: PBS only (concentration< 0.5mg/ml)
Concentration	100 ug/ml (varies by lot)
Applicable Applications for anti-SIRL-1 antibody	WB (Western Blot), IP (Immunoprecipitation), FA (Functional Assay), FCM/FACS (Flow Cytometry)
Endotoxin	<0.4 EU/mg
Conjugate	None
Immunogen	Purified SIRL-1-hlg fusion protein in PBS
Preparation and Storage	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

ADDITIONAL INFORMATION

Related Product Information for anti-SIRL-1 antibody	The monoclonal antibody 1A5 recognizes human Signal inhibitory Receptor on Leucocytes-1 (SIRL-1). In order to prevent host tissue damage immune activation has to be tightly regulated. Neutrophils and other myeloid cells have a pivotal role in controlling infection. They form the primary response at site of infection as they regulate replication of pathogens by phagocytosis, secretion of antimicrobial peptides and proinflammatory cytokines to activate the immune system. Without regulation these mediators can cause tissue damage or worse. To balance the immune response immune cells can express inhibitory receptors. The family of immune inhibitory receptors is still expanding. The relatively new receptor SIRL-1 is an immunoreceptor tyrosine-based inhibitory motif (ITIM)-bearing membrane protein expressed on human phagocytes. SIRL-1 contains two ITIMs in the intracellular tail, which are crucial for function. SIRL-1 can recruit the SH2-domain containing tyrosine phosphatases, SHP-1 and SHP-2, which may mediate the inhibitory effect. ITIM-bearing receptors inhibit signals relayed by immunoreceptor tyrosine-based activating motifs (ITAMs). ITAMs are the principal mediators of signal transduction for various receptors, including FcRs and C-type lectins. The ligation of SIRL-1 dampens Fc receptor induced ROS production in phagocytes, thereby impairing the microbicidal activity of neutrophils without affecting phagocytosis. Infectious stimuli cause rapid downregulation of SIRL-1 expression. This allows microbial killing and clearance of pathogens. Neutrophil extracellular traps (NETs) have been implicated in the pathogenesis of systemic lupus erythematosus (SLE). Using anti SIRL-1 antibodies both spontaneous anti-neutrophil antibody induced NET formation is suppressed. This suggests a regulatory role for SIRL-1 in NET formation and a therapeutic target for regulation of SLE.
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References

1.Steevels, T et al; Signal Inhibitory Immune Receptor on Leukocytes Is a Novel Functional Inhibitory Immune Receptor Expressed on Human Pagocytes. J Immunol 2010, 184

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/sirl-1-antibody-clone-1a5-western-blot-immunoprecipitation-functional-assay-flow-cytometry-elisa/77808>