

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Sca-1/Ly6 in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 177228
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Sca-1/Ly6 C-terminally truncated Ly-6E allele Leu27-Gly119 Accession # CAA28351
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Mouse splenocytes gated on hematopoietic lineage negative cells

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Stem Cell Antigen-1 (Sca-1) is encoded by the strain-specific *Ly-6 E/A* allelic gene. Its expression on multipotent hematopoietic stem cells (HSC) has been used as a marker of HSC in mice of both Ly-6 haplotypes (2, 3). This antibody is frequently used in combination with lineage depletion antibodies to identify and isolate murine HSC. Sca-1-positive HSC can be found in the adult bone marrow, fetal liver and mobilized peripheral blood and spleen in the adult animal (2-7). However, Sca-1 has also been discovered in several non-hematopoietic tissues (1) and can be used to enrich progenitor cell populations other than HSC (8). It is suggested that Sca-1 could be involved in regulating both B and T cell activation (9-12).

References:

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