

DESCRIPTION

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| 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 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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

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| 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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