Mouse Sca-1/Ly6 APC-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 177228

Catalog Number: FAB1226A

100 Tests, 25 Tests

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	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied 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.

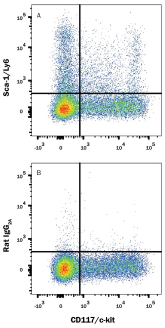
APPLICATIONS

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	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of Sca-1/Ly6 in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes gated on hematopoietic lineage negative cells were stained with Rat Anti-Mouse CD117/c-kit PE-conjugated Monoclonal Antibody (Catalog # FAB1356P) and either (A) Rat Anti-Mouse Sca-1/Ly6 APC-conjugated Monoclonal Antibody (Catalog # FAB1226A) or (B) Rat IgG_{2A} Allophycocyanin Isotype Control (Catalog # IC006A). View our protocol for Staining Membrane-associated Proteins.

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.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Mouse Sca-1/Ly6 APC-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 177228

Catalog Number: FAB1226A

100 Tests, 25 Tests

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:

1. Van de Rijn, M. *et al.* (1989) Proc. Natl. Acad. Sci. USA **86**:4634.
2. Spangrude, G.I. *et al.* (1988) Science **241**:58.
3. Spangrude, G.I. *et al.* (1993) Blood **82**:3327.
4. Morrison, S.J. *et al.* (1995) Proc. Natl. Acad. Sci. USA **92**:10302.
5. Kawamoto, H. *et al.* (1997) Int. Immunol. **9**:1011.
6. Yamamoto, Y. *et al.* (1996, Blood **88**:445.
7. Morrison, S.J. *et al.* (1997) Proc. Natl. Acad. Sci. USA **94**:1908.
8. Welm, B.E. *et al.* (2002) Dev. Biol. **245**:42.
9. Codias, E.K. *et al.* (1990) J. Immunol. **144**:2197.
10. Malek, T.R. *et al.* (1986) J. Exp. Med. **164**:709.
11. Codias, E.K. *et al.* (1990) J. Immunol. **145**:1407.
12. Flood, P.M. *et al.* (1990) J. Exp. Med. **172**:115.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449