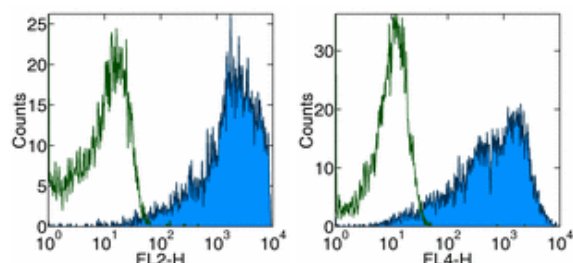


Product Information

Contents: Affinity Purified anti-mouse Sca-1 (Ly-6A/E)
Catalog Number: 14-5981
Sizes: 50 ug, 100 ug, 500 ug
Formulation: Phosphate buffer pH 7.2,
150 mM NaCl, 0.09% NaN₃
Storage Conditions: Store at 4°C.
Avoid repeated freeze/thaw cycles.
Clone: D7
Isotype: Rat IgG2a, κ



Surface staining of ConA stimulated splenocytes with anti-mouse Ly-6A/E (D7) PE (left), and APC (right). Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
11-5981	FITC anti-mouse Ly-6A/E (Sca-1, Sca1)	488	518	FC
12-5981	PE anti-mouse Ly-6A/E (Sca-1, Sca1)	488	575	FC
13-5981	Biotin anti-mouse Ly-6A/E (Sca-1, Sca1)	N/A	N/A	FC
14-5981	Affinity Purified anti-mouse Ly-6A/E (Sca-1, Sca1)	N/A	N/A	FC IP WB
15-5981	PE-Cy5 anti-mouse Ly-6A/E (Sca-1, Sca1)	488	670	FC
16-5981	Functional Grade* Purified anti-mouse Ly-6A/E (Sca-1, Sca1)	N/A	N/A	FC
17-5981	APC anti-mouse Ly-6A/E (Sca-1, Sca1)	633	660	FC
25-5981	Phycoerythrin-Cy7 (PE-Cy7) anti-mouse Ly-6A/E (Sca-1, Sca1)	488	760	FC
35-5981	Phycoerythrin-Cy5.5 (PE-Cy5.5) anti-mouse Ly-6A/E (Sca-1, Sca1)	488	690	FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/μg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

Description

The D7 monoclonal antibody reacts with mouse Sca-1, an 18 kDa member of the Ly-6 family of GPI-linked surface proteins. D7 reacts with both Ly-6E.1 and Ly-6A.2 molecules expressed by mouse hematopoietic stem cells, myeloid population and peripheral T and B cells. Non-activated splenocytes from Ly-6.2 strains including C57BL, SJL, 129, AKR, and others demonstrate higher frequency of D7-positive cells compared to the Ly-6.1 strains such as BALB/c, C3H, NZB and others. Sca-1 is expressed at high levels upon activation regardless of the Ly-6 haplotype. The Ly-6 family is involved in regulation and function of T cell activation. Sca-1 is a major phenotypic marker for mouse hematopoietic progenitor/stem cell subset.

Usage

For research use only, not for diagnostic or therapeutic use. D7 has been reported for use in flow cytometric analysis, immunohistochemistry, immunoblotting (WB), immunoprecipitation, and in functional assays (use Functional Grade purified, cat.16-5981).

Applications Tested

The D7 antibody has been tested by flow cytometric analysis of mouse splenocyte and bone marrow cell suspensions and can be used at less than or equal to 0.5 μg/million cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 11-4317	Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317	Streptavidin-PE (Phycoerythrin)
Cat. 17-4317	Streptavidin Allophycocyanin (SA-APC)
Cat. 14-4321	Affinity Purified Rat IgG2a Isotype Control
Cat. 11-4811	FITC Anti-Rat IgG
Cat. 13-4813	Biotin Anti-Rat IgG (clone Polyclonal)

References

Ortega, G., P. E. Kory, et al. (1986). "Role of Ly-6 in lymphocyte activation. I. Characterization of a monoclonal antibody to a nonpolymorphic Ly-6 specificity." J Immunol 137(10): 3240-6.

Malek, T. R., G. Ortega, et al. (1986). "Role of Ly-6 in lymphocyte activation. II. Induction of T cell activation by monoclonal anti-Ly-6 antibodies." J Exp Med 164(3): 709-22.