

Tel: 888.999.1371 or 858.642.2058

Fax: 858.642.2046 Web: www.ebioscience.com E-mail: info@ebioscience.com

Product Information

Contents: Biotin anti-mouse Sca-1 (Ly-6A/E)

Catalog Number: 13-5981 Sizes: 50 ug, 100 ug, 500 ug

Formulation: Phosphate buffer pH 7.2,

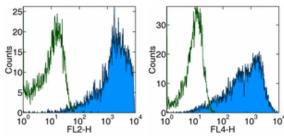
150 mM NaCl, 0.09% NaN₃

Storage Conditions: Store at 4°C.

DO NOT FREEZE.

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			
Format	Excite (nm)	Emit (nm)	Reported Applications
FITC anti-mouse Ly-6A/E (Sca-1, Sca1)	488	518	FC
PE anti-mouse Ly-6A/E (Sca-1, Sca1)	488	575	FC
Biotin anti-mouse Ly-6A/E (Sca-1, Sca1)	N/A	N/A	FC
Affinity Purified anti-mouse Ly-6A/E (Sca-1, Sca1)	N/A	N/A	FC IP WB
PE-Cy5 anti-mouse Ly-6A/E (Sca-1, Sca1)	488	670	FC
Functional Grade* Purified anti-mouse Ly-6A/E (Sca-1, Sca1)	N/A	N/A	FC
APC anti-mouse Ly-6A/E (Sca-1, Sca1)	633	660	FC
Phycoerythrin-Cy7 (PE-Cy7) anti-mouse Ly-6A/E (Sca-1, Sca1)	488	760	FC
Phycoerythrin-Cy5.5 (PE-Cy5.5) anti-mouse Ly-6A/E (Sca-1, Sca1)	488	690	FC
	Format FITC anti-mouse Ly-6A/E (Sca-1, Sca1) PE anti-mouse Ly-6A/E (Sca-1, Sca1) Biotin anti-mouse Ly-6A/E (Sca-1, Sca1) Affinity Purified anti-mouse Ly-6A/E (Sca-1, Sca1) PE-Cy5 anti-mouse Ly-6A/E (Sca-1, Sca1) Functional Grade* Purified anti-mouse Ly-6A/E (Sca-1, Sca1) APC anti-mouse Ly-6A/E (Sca-1, Sca1) Phycoerythrin-Cy7 (PE-Cy7) anti-mouse Ly-6A/E (Sca-1, Sca1)	Format Excite (nm) FITC anti-mouse Ly-6A/E (Sca-1, Sca1) PE anti-mouse Ly-6A/E (Sca-1, Sca1) Biotin anti-mouse Ly-6A/E (Sca-1, Sca1) Affinity Purified anti-mouse Ly-6A/E (Sca-1, Sca1) PE-Cy5 anti-mouse Ly-6A/E (Sca-1, Sca1) Functional Grade* Purified anti-mouse Ly-6A/E (Sca-1, Sca1) APC anti-mouse Ly-6A/E (Sca-1, Sca1) Phycoerythrin-Cy7 (PE-Cy7) anti-mouse Ly-6A/E (Sca-1, Sca1) A88	Format

^{*}Functional Grade^{\mathbb{M}} (FG \mathbb{M}): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/ \mathbb{M} 9. 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.

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 $0.5 \mu g/million$ cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)

Cat. 13-4321 Biotin Rat IgG2a Isotype Control

References

Ortega, G., P. E. Korty, et al. (1986). "Role of Ly-6 in lymphocyte activation. I. Characterization of a monoclonal antibody to a nonpolymorphic Ly-6 specificity." <u>J Immunol</u> 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.

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