

Purified anti-mouse Ly-6A/E (Sca-1) Antibody

Catalog# / Size	160902 / 100 µg
Clone	W18174A
Regulatory Status	RUO
Other Names	Sca-1
Isotype	Rat IgG2a, κ

Description Ly-6A/E, also known as Sca-1, is an 18 kD member of the Ly-6 multigene family. Ly6A/E is a glycosylphosphatidylinositol (GPI)-linked protein expressed on hematopoietic stem cells. In mice expressing the Ly-6.2 haplotype (e.g., AKR, C57BL, C57BR, DBA/2, SJL, SWR, and 129), Ly-6A/E is also expressed on peripheral B lymphocytes and thymic and peripheral T lymphocytes. Strains expressing the Ly-6.1 haplotype (e.g., BALB/c, CBA, C3H/He, DBA/1, and NZB) have low Ly-6A/E expression on resting peripheral lymphocytes. The expression of Ly-6A/E on lymphocytes is upregulated upon activation from both Ly6.1 and Ly6.2 haplotype mice. Ly-6A/E is thought to be involved in the regulation of both T and B cell responses.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	EL4 Cell
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.125 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Strains expressing the Ly-6.1 haplotype (e.g., BALB/c, CBA, C3H/He, DBA/1, and NZB) have low Ly-6A/E expression on resting peripheral lymphocytes.
Product Citations	1. Hammers DW, <i>et al.</i> 2022. JCI Insight. 7.: PubMed
RRID	AB_2876574 (BioLegend Cat. No. 160902)

Antigen Details

Structure	Ly-6 multigene family, 18 kD
Distribution	Hematopoietic stem cells, activated T cells and B cells, subset of resting B cells and T cells
Function	Regulates B and T cell responses
Cell Type	B cells, Embryonic Stem Cells, Hematopoietic stem and progenitors, Mesenchymal Stem Cells, T cells, Thymocytes

Biology Area

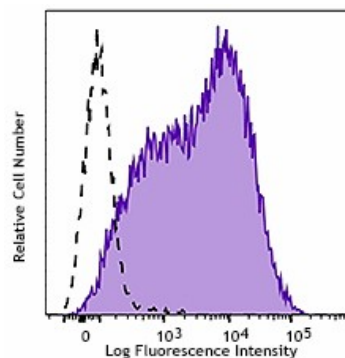
Stem Cells

Antigen References

1. Upadhyay G. 2019. *Front Immunol.* 10:819.
2. Rock KL, et al. 1989. *Immunol. Rev.* 111:195-224.

Gene ID[110454](#)**Related Protocols**[Cell Surface Flow Cytometry Staining Protocol](#)**Other Formats**

Purified anti-mouse Ly-6A/E (Sca-1), APC anti-mouse Ly-6A/E (Sca-1), PE anti-mouse Ly-6A/E (Sca-1), FITC anti-mouse Ly-6A/E (Sca-1)

Product Data

C57BL/6 mouse splenocytes were stained with purified anti-mouse Ly-6A/E (clone W18174A) (filled histogram) or purified anti-rat IgG2a, κ isotype control (open histogram), followed by anti-rat IgG PE antibody.

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