

Product Data Sheet

Alexa Fluor® 647 anti-mouse Ly-6A/E (Sca-1)

Catalog # / Size: 122517 / 25 µg
122518 / 100 µg

Clone: E13-161.7

Isotype: Rat IgG2a, κ

Immunogen: mouse pre-T cells

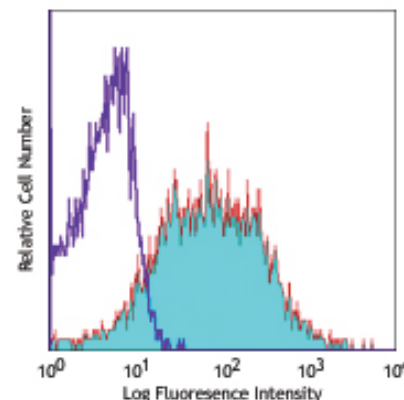
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



C57BL/6 mouse splenocytes stained with E13-161.7 Alexa Fluor® 647

Applications:

Applications: FC - *Quality tested*
IHC, IF - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

** Alexa Fluor® 647 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 647 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Additional reported applications (for the relevant formats) include: complement-mediated cytotoxicity¹, immunohistochemical staining of frozen sections^{2,4} and immunofluorescence microscopy⁴, and immunoprecipitation³.

Application References:

1. Aihara Y, *et al.* 1986. *Eur. J. Immunol.* 16:1391. (CMCD)
2. Spangrude GJ, *et al.* 1988. *J. Immunol.* 141:3697. (IHC)
3. van de Rijn M, *et al.* 1989. *P. Natl. Acad. Sci. USA* 86:4634. (IF)
4. van Bragt MPA, *et al.* 2005. *Biol. Reprod.* 73:634. (IHC IF)
5. Rosas M, *et al.* 2010. *J. Leukoc. Biol.* 88:169. PubMed

Description: Ly-6A/E is an 18 kD member of the Ly-6 multigene family also known as Sca-1. 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. The E13-161.7 antibody has been reported to be useful for immunohistochemical staining of frozen sections, immunoprecipitation, flow cytometry, and complement-mediated cytotoxicity.

Antigen References:

1. Rock KL, *et al.* 1989. *Immunol. Rev.* 111:195.
2. Morrison SJ, *et al.* 1994. *Immunity* 1:661.
3. Spangrude GJ, *et al.* 1988. *J. Immunol.* 141:3697.
4. Malek T, *et al.* 1986. *J. Exp. Med.* 164:709.

Related Products:

Product	Clone	Application
Cell Staining Buffer		FC, ICC, ICFC
Alexa Fluor® 647 Rat IgG2a, κ Isotype Ctrl	RTK2758	FC, ICFC
TruStain fcX™ (anti-mouse CD16/32)	93	FC



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