

## Pacific Blue™ anti-mouse Ly-6A/E (Sca-1)

**Catalog # / Size:** 122519 / 25 µg  
122520 / 100 µg

**Clone:** E13-161.7

**Isotype:** Rat IgG2a, κ

**Immunogen:** mouse pre-T cells

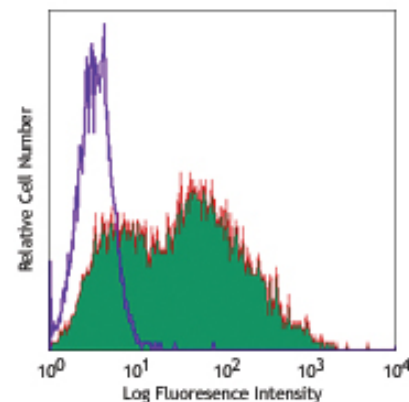
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

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

**Concentration:** 0.5 mg/ml

**Storage:** The Ly-6A/E 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 Pacific Blue™ E13-161.7

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** This Ly-6A/E reagent is developed for immunofluorescent staining for flow cytometric analysis, the suggested use of this reagent is ≤ 1.0 µg per 10<sup>6</sup> cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ 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 cytotoxicity<sup>1</sup>, immunohistochemical staining of frozen sections<sup>2,4</sup> and immunofluorescence microscopy<sup>4</sup>, and immunoprecipitation<sup>3</sup>.

**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**  
Cell Staining Buffer

Pacific Blue™ Rat IgG2a, κ Isotype Ctrl

TruStain fcX™ (anti-mouse CD16/32)

### Clone

RTK2758

93

### Application

FC, ICC, ICFC

FC, ICFC

FC



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