SONY

Product Data Sheet

PE/Cyanine7 anti-mouse Ly-6A/E (Sca-1)

Catalog # / Size: 1212565 / 25 µg
1212570 / 100 µg

Clone: E13-161.7

Isotype: Rat IgG2a, κ

Immunogen: mouse pre-T cells

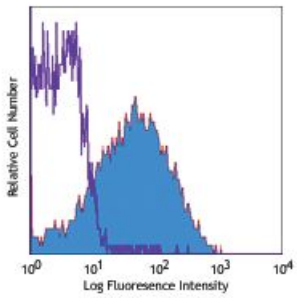
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions.

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

Workshop Number: 750 under optimal conditions.

Concentration: 0.2



C57BL/6 mouse splenocytes stained with E13-161.7 PE/Cy7

Applications:

Applications: Flow Cytometry

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 ≤ 0.25 µg per 10^6 cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: complement-mediated cytoxicity[1], immunohistochemical staining of frozen sections[2] and Bouin-fixed, paraffin-embedded samples[4], immunofluorescence microscopy[4], and immunoprecipitation[3].

The two Sca-1 recognizing clones D7 and E13-161.7 have been shown to bind distinct epitopes due to the inability of D7 to block the binding of E13-161.7.

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 Rijin M, *et al.* 1989. *P. Natl. Acad. Sci. USA* 86:4634. (IP)
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
6. Felthause O, *et al.* 2010. *Neurosci Lett.* 471:179. PubMed
7. Bamezai A and Rock KL. 1995. *Proc. Natl. Acad. Sci. USA* 92:4294.
8. Hara T, *et al.* 2012. *J. Immunol.* 189:1577. PubMed

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

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.

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.