

Datasheet: MCA2782

BATCH NUMBER 170317

Description:	RAT ANTI MOUSE Ly-6A/E
Specificity:	Ly-6A/E
Other names:	Sca-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	D7
Isotype:	IgG2a
Quantity:	0.25 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared from ascites or tissue culture supernatant
Buffer Solution	Borate buffered saline
Preservative Stabilisers	0.09% Sodium Azide

Approx. Protein Concentrations	IgG concentration 0.5mg/ml
Immunogen	IL-2-dependent mouse T cell line CTL-L.
External Database Links	<p>UniProt: P05533 Related reagents</p> <p>Entrez Gene: 110454 Ly6a Related reagents</p>
Synonyms	Ly6
RRID	AB_1102736
Specificity	<p>Rat anti Mouse Ly-6A/E antibody, clone D7 recognizes members of the lymphocyte activation protein-6 (Ly-6) multi-gene family. Specifically, it recognizes Ly-6A.2 and Ly-6E.1. Ly-6A/E is also known as stem cell antigen-1 (Sca-1). It is an 18kDa mouse glycosyl phosphatidylinositol-anchored cell surface protein of the Ly-6 gene family. It is expressed on multipotent hematopoietic stem cells in bone marrow of mice with both the Ly-6.1 and Ly-6.2 allotypes. As such, it is the most common marker used for enriching adult hematopoietic stem cells. It has varied functions, it plays a role in bone formation, myoblast proliferation and differentiation and the activation and immunosuppressive function of T cells.</p> <p>Rat anti Mouse Ly-6A/E antibody, clone D7 has been reported to induce T cell activation. Removal of sodium azide is recommended prior to use in functional assays.</p>
References	<ol style="list-style-type: none"> Holmes, C. & Stanford, W.L. (2007) Concise review: stem cell antigen-1: expression, function, and enigma. Stem Cells. 25 (6): 1339-47. Ortega, G. <i>et al.</i> (1986) Role of Ly-6 in lymphocyte activation. I. Characterization of a monoclonal antibody to a nonpolymorphic Ly-6 specificity. J Immunol. 137 (10): 3240-6. Malek, T.R. <i>et al.</i> (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. Codias, E.K. <i>et al.</i> (1990) Down-regulation of IL-2 production by activation of T cells through Ly-6A/E. J Immunol. 145 (5): 1407-14. Snapper, C.M. <i>et al.</i> (1991) Cross-linkage of Ly-6A/E induces Ca²⁺ translocation in the absence of phosphatidylinositol turnover and mediates proliferation of normal murine B lymphocytes. J Immunol. 147 (4): 1171-9.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10077 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2782>
10077

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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