

Datasheet: MCA2782

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	UniProt:

Entrez Gene:

[110454](#) Ly6a [Related reagents](#)

Synonyms

Ly6

Specificity

Rat anti Mouse Ly-6A/E antibody, clone D7 recognises members of the lymphocyte activation protein-6 (Ly-6) multigene family. Specifically, it recognises 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.

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. Bio-Rad recommend the use of [EQU003](#) for this purpose.

References

1. Holmes, C. & Stanford, W.L. (2007) Concise review: stem cell antigen-1: expression, function, and enigma. [Stem Cells. 25 \(6\): 1339-47.](#)
2. Ortega, G. *et al.* (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.](#)
3. Malek, T.R. *et al.* (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.](#)
4. Codias, E.K. *et al.* (1990) Down-regulation of IL-2 production by activation of T cells through Ly-6A/E. [J Immunol. 145 \(5\): 1407-14.](#)
5. Snapper, C.M. *et al.* (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

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
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.

Shelf Life

18 months from date of despatch.

Health And Safety Information

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

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP

Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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