

## Datasheet: MCA2782

<b>Description:</b>	RAT ANTI MOUSE Ly-6A/E
<b>Specificity:</b>	Ly-6A/E
<b>Other names:</b>	Sca-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	D7
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared from ascites or tissue culture supernatant
<b>Buffer Solution</b>	Borate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5mg/ml
<b>Immunogen</b>	IL-2-dependent mouse T cell line CTL-L.
<b>External Database Links</b>	<b>UniProt:</b>

[P05533](#)   [Related reagents](#)

**Entrez Gene:**

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

---

**Synonyms**   Ly6

---

**RRID**   AB\_1102736

---

**Specificity**   **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.

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. We recommend the use of Slide-A-Lyser dialysis cassettes ([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 Ca<sup>2+</sup> 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.

---

**Guarantee**   12 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 (STAR17...)

[FITC](#)

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos., Biotin</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®800</a>

## Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

'M367453:200529'

Printed on 11 Aug 2020