

## Datasheet: MCA4707T

**BATCH NUMBER 173108**

<b>Description:</b>	RAT ANTI MOUSE CD107a
<b>Specificity:</b>	CD107a
<b>Other names:</b>	LAMP-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1D4B
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	25 µg

## 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	▪			1/10 - 1/20
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

Where this product 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 product 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 by affinity chromatography
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )

<b>Approx. Protein Concentrations</b>	IgG concentration 0.5mg/ml
<b>Immunogen</b>	Mouse 3T3 embryonic fibroblastoid cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P11438</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16783</a> Lamp1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Lamp-1
<b>RRID</b>	AB_2134482
<b>Fusion Partners</b>	Spleen cells from immunized Balb/c mice were fused with cells of the non-secreting murine P3-X63Ag8 myeloma.
<b>Specificity</b>	<b>Rat anti Mouse CD107a antibody, clone 1D4B</b> recognises murine CD107a, otherwise known as Lysosome-associated membrane glycoprotein 1 or LAMP-1. CD107a is a glycoprotein responsible for presenting carbohydrate ligands to selectins. It may also play a role in tumour metastasis. It is expressed ubiquitously, with higher levels in spleen, liver and kidney. CD107a may be used as a marker for lysosomal storage disorders.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Winder, A.J. <i>et al.</i> (1993) The mouse brown (b) locus protein has dopachrome tautomerase activity and is located in lysosomes in transfected fibroblasts. <a href="#">J Cell Sci. 106 ( Pt 1): 153-66.</a></li> <li>2. Andrejewski, N. <i>et al.</i> (1999) Normal lysosomal morphology and function in LAMP-1-deficient mice. <a href="#">J Biol Chem. 274 (18): 12692-701.</a></li> <li>3. Sobue, A. <i>et al.</i> (2018) Astroglial major histocompatibility complex class I following immune activation leads to behavioral and neuropathological changes. <a href="#">Glia. 66 (5): 1034-52.</a></li> </ol>
<b>Storage</b>	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	Guaranteed until date of expiry. Please see product label.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA4707T">https://www.bio-rad-antibodies.com/SDS/MCA4707T</a>
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>

### Recommended Negative Controls

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

Product inquiries: [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
'M390190:210825'

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