

## Datasheet: MCA2048T

<b>Description:</b>	MOUSE ANTI HUMAN CD222
<b>Specificity:</b>	CD222
<b>Other names:</b>	IGF-2 RECEPTOR
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-238
<b>Isotype:</b>	IgG1
<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)	▪			1/25 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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

**(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Rhesus Monkey</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant vaccinia virus containing CD222.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P11717</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3482</a>    IGF2R    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MPRI
<b>RRID</b>	AB_2233478
<b>Specificity</b>	<p><b>Mouse anti Human CD222 antibody, clone MEM-238</b> recognizes human CD222, a 250 kDa transmembrane protein originally identified as the IGF II receptor. CD222 is ubiquitously expressed and is involved with internalization of a variety of ligands.</p> <p>Mouse anti Human CD222 antibody, clone MEM-238 recognizes an epitope located in the region between extracellular domains 2 and 5 (aa 192-697) of CD222 (<a href="#">Roberts <i>et al.</i> 2010</a>).</p> <p>CD222 is primarily expressed intracellularly with a small percentage of molecules being located at the cell surface (5 - 10%).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Roberts, R.C. <i>et al.</i> (2010) Mistargeting of SH3TC2 away from the recycling endosome causes Charcot-Marie-Tooth disease type 4C. <a href="#">Hum Mol Genet. 19: 1009-18.</a></li> <li>2. Adachi, A. <i>et al.</i> (2010) Golgi-associated GSK3beta regulates the sorting process of post-Golgi membrane trafficking. <a href="#">J Cell Sci. 123: 3215-25.</a></li> <li>3. Godar, S. <i>et al.</i> (2002) CD222 (Mannose-6 phosphate / insulin-like growth factor II-receptor) Summary and Workshop Report. In Leucocyte Typing VII: White Cell Differentiation Antigens. Edited by Mason, D. <i>et al.</i> Oxford University Press. pp482-485.</li> <li>4. Rezgui, D. <i>et al.</i> (2009) Structure and function of the human Gly1619Arg polymorphism of M6P/IGF2R domain 11 implicated in IGF2 dependent growth. <a href="#">J Mol Endocrinol. 42: 341-56.</a></li> <li>5. McCormick, P.J. <i>et al.</i> (2008) Palmitoylation controls recycling in lysosomal sorting and trafficking. <a href="#">Traffic. 9: 1984-97.</a></li> <li>6. Leksa, V. <i>et al.</i> (2002) The N terminus of mannose 6-phosphate/insulin-like growth factor 2 receptor in regulation of fibrinolysis and cell migration. <a href="#">J Biol Chem. 277 (43): 40575-82.</a></li> </ol>

7. Osborne, D.G. *et al.* (2015) Monitoring receptor trafficking following retromer and WASH deregulation. [Methods Cell Biol. 130: 199-213.](#)

8. Hertel, A. *et al.* (2022) USP32-regulated LAMTOR1 ubiquitination impacts mTORC1 activation and autophagy induction. [Cell Rep. 41 \(10\): 111653.](#)

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**Storage** 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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2048T>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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**Europe**

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

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