

## Datasheet: MCA2344PE

<b>Description:</b>	MOUSE ANTI HUMAN CD221:RPE
<b>Specificity:</b>	CD221
<b>Other names:</b>	IGF-1 RECEPTOR
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1H7
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

## 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	■			Neat

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>	Human		
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<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</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
	5% Sucrose		
<b>Immunogen</b>	Purified human placental IGF-I receptor.		
<b>External Database Links</b>	<b>UniProt:</b>		
	<a href="https://www.uniprot.org/entry/P08069">P08069</a>	<a href="#">Related reagents</a>	

**Entrez Gene:**

[3480](#) IGF1R [Related reagents](#)

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<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 myeloma cell line.
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<b>Specificity</b>	<p><b>Mouse anti Human CD221 antibody, clone 1H7</b> recognizes human CD221, a ~155 kDa receptor tyrosine kinase, also known as Insulin-like growth factor I receptor (IGF-I Receptor). CD221 is composed of two extracellular alpha-subunits and two transmembrane beta-subunits. Clone 1H7 recognizes an epitope in the alpha subunits of CD221, demonstrated by western blotting (<a href="#">Li et al.1993</a>).</p> <p>CD221 is expressed in a range of tissues, including kidney, liver, placenta, mammary gland, brain, ovary and skin.</p> <p>The ligands for CD221 include IGF-I and IGF-II, which bind to CD221 and activate tyrosine kinase activity, resulting in phosphorylation of several intracellular signalling proteins. Clone 1H7 is reported to partially block binding of IGF-I and IGF-II to CD221 (<a href="#">Li et al.1993</a>).</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>1. Li, S.L. <i>et al.</i> (1993) Two new monoclonal antibodies against the alpha subunit of the human insulin-like growth factor-I receptor. <a href="#">Biochem Biophys Res Commun. 196 (1): 92-8.</a></li><li>2. Beauvais, D.M. &amp; Rapraeger, A.C. (2010) Syndecan-1 couples the insulin-like growth factor-1 receptor to inside-out integrin activation. <a href="#">J Cell Sci. 123 (Pt 21): 3796-807.</a></li><li>3. Krieger, C.C. <i>et al.</i> (2016) Thyrotropin/IGF-1 receptor crosstalk in Graves' ophthalmopathy pathogenesis. <a href="#">J Clin Endocrinol Metab. Apr 4: jc20161315. [Epub ahead of print]</a></li><li>4. van Valen, F. <i>et al.</i> (2012) A Novel Role of IGF1 in Apo2L/TRAIL-Mediated Apoptosis of Ewing Tumor Cells. <a href="#">Sarcoma. 2012: 782970.</a></li></ol>
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<b>Storage</b>	<p>Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Shelf Life</b>	12 months from date of reconstitution.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10075 available at: 10075: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

HUMAN SEROBLOCK (BUF070B)

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