

## Datasheet: MCA5747PE

<b>Description:</b>	MOUSE ANTI HUMAN CD300a:RPE
<b>Specificity:</b>	CD300a
<b>Other names:</b>	IRp60
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	P192
<b>Isotype:</b>	IgG2a
<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 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>	Human		
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1.0ml 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 A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
	5% Sucrose		

<b>Immunogen</b>	Polyclonal population of NK cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9UGN4</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">11314</a>    CD300A    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CMRF35H, IGSF12
<b>RRID</b>	AB_11152762
<b>Fusion Partners</b>	Spleen cells from immunized mice were fused with cells of the P3U1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD300a antibody, clone P192</b> recognizes human CD300a, otherwise known as IRp60 or inhibitory receptor protein 60. CD300a is a ~60kDa transmembrane glycoprotein expressed by natural killer cells (NK), T and B cell subsets, monocytes, neutrophils, macrophages, granulocytes, dendritic cells (DC) and mast cells.</p> <p>Cross-linking of CD300a on NK results in a down-regulation of their cytolytic activity, whilst cross-linking of CD300a on mast cells, inhibits IgE-induced degranulation and SCF-mediated survival. Furthermore, cross-linking of CD300a on the surface of eosinophils significantly inhibits their survival, chemotaxis and activation in response to certain inflammatory cytokines, whilst eosinophil-derived MBP (major basic protein) and EDN (neurotoxin), can down-regulate CD300a expression on mast cells <i>in vitro</i>.</p>
<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. Bachelet, I. <i>et al.</i> (2005) The inhibitory receptor IRp60 (CD300a) is expressed and functional on human mast cells. <a href="#">J Immunol. 175: 7989-95.</a></li> <li>2. Bachelet, I. <i>et al.</i> (2006) Abrogation of allergic reactions by a bispecific antibody fragment linking IgE to CD300a. <a href="#">J Allergy Clin Immunol. 117: 1314-20.</a></li> <li>3. Bachelet, I. <i>et al.</i> (2008) Suppression of normal and malignant kit signaling by a bispecific antibody linking kit with CD300a. <a href="#">J Immunol. 180: 6064-9.</a></li> <li>4. Munitz, A. <i>et al.</i> (2006) The inhibitory receptor IRp60 (CD300a) suppresses the effects of IL-5, GM-CSF, and eotaxin on human peripheral blood eosinophils. <a href="#">Blood. 107:1996-2003.</a></li> </ol>
<b>Storage</b>	<p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at +4°C.</p> <p>DO NOT FREEZE. 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>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at:

**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

### Recommended Useful Reagents

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

[HUMAN SEROBLOCK \(BUF070B\)](#)

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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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