

Datasheet: MCA5747PE

BATCH NUMBER 0311

Description:	MOUSE ANTI HUMAN CD300a:RPE
Specificity:	CD300a
Other names:	IRp60
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	P192
Isotype:	IgG2a
Quantity:	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.

	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.

Target Species	Human		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		

5% Sucrose

Immunogen	Polyclonal population of NK cells.
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External Database Links	UniProt: Q9UGN4 Related reagents
	Entrez Gene: 11314 CD300A Related reagents

Synonyms	CMRF35H, IGSF12
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RRID	AB_11152762
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Fusion Partners	Spleen cells from immunized mice were fused with cells of the P3U1 myeloma cell line.
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Specificity	<p>Mouse anti Human CD300a antibody, clone P192 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>
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Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.
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References	<ol style="list-style-type: none">1. Cantoni, C. <i>et al.</i> (1999) Molecular and functional characterization of IRp60, a member of the immunoglobulin superfamily that functions as an inhibitory receptor in human NK cells. Eur J Immunol. 29: 3148-59.2. Bachelet, I. <i>et al.</i> (2005) The inhibitory receptor IRp60 (CD300a) is expressed and functional on human mast cells. J Immunol. 175: 7989-95.3. Bachelet, I. <i>et al.</i> (2006) Abrogation of allergic reactions by a bispecific antibody fragment linking IgE to CD300a. J Allergy Clin Immunol. 117: 1314-20.4. Bachelet, I. <i>et al.</i> (2008) Suppression of normal and malignant kit signaling by a bispecific antibody linking kit with CD300a. J Immunol. 180: 6064-9.5. 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. Blood. 107:1996-2003.
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Storage	Prior to reconstitution store at +4°C. After reconstitution store at +4°C. 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
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recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA5747PE
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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 \(BUF070B\)](#)

Product inquiries: 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

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