

Datasheet: MCA5747

BATCH NUMBER 167009

Description:	MOUSE ANTI HUMAN CD300a
Specificity:	CD300a
Other names:	IRp60
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	P192
Isotype:	IgG2a
Quantity:	0.2 mg

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	▪			1/25 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays			▪	

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 - liquid
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

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0mg/ml

Immunogen Polyclonal population of NK cells.

External Database Links

UniProt:

[Q9UGN4](#) [Related reagents](#)

Entrez Gene:

[11314](#) CD300A [Related reagents](#)

Synonyms CMRF35H, IGSF12

RRID AB_10960847

Fusion Partners Spleen cells from immunized mice were fused with cells of the P3U1 myeloma cell line.

Specificity **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.

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 *in vitro*.

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Bachelet, I. *et al.* (2005) The inhibitory receptor IRp60 (CD300a) is expressed and functional on human mast cells. [J Immunol. 175: 7989-95.](#)
 2. Bachelet, I. *et al.* (2006) Abrogation of allergic reactions by a bispecific antibody fragment linking IgE to CD300a. [J Allergy Clin Immunol. 117: 1314-20.](#)
 3. Bachelet, I. *et al.* (2008) Suppression of normal and malignant kit signaling by a bispecific antibody linking kit with CD300a. [J Immunol. 180: 6064-9.](#)
 4. Munitz, A. *et al.* (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 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.

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/MCA5747 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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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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