

Datasheet: MCA5747

**BATCH NUMBER 1605**

<b>Description:</b>	MOUSE ANTI HUMAN CD300a
<b>Specificity:</b>	CD300a
<b>Other names:</b>	IRp60
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	P192
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human
<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</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

## Stabilisers

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**Carrier Free** Yes

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**Approx. Protein Concentrations** IgG concentration 1.0mg/ml

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**Immunogen** Polyclonal population of NK cells.

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## External Database Links

### UniProt:

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

### Entrez Gene:

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

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**Synonyms** CMRF35H, IGSF12

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**RRID** AB\_10960847

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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** **Mouse anti Human CD300a antibody, clone P192** specifically recognizes human CD300a, otherwise known as IRp60 (inhibitory receptor protein 60), 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.

Studies have shown that the 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 has been shown to significantly inhibit 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*.

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**Flow Cytometry** Use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul.

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## References

1. Cantoni, C. *et al.* (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. *et al.* (2005) The inhibitory receptor IRp60 (CD300a) is expressed and functional on human mast cells. [J Immunol. 175: 7989-95.](#)
3. 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.](#)
4. 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.](#)
5. 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.](#)

<b>Storage</b>	Store at +4°C -20°C . Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA5747">https://www.bio-rad-antibodies.com/SDS/MCA5747</a> 10040
<b>Regulatory</b>	For research purposes only

## 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)  
'M368356:200529'

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