

Datasheet: MCA5747

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 G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
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

Fusion Partners

Spleen cells from immunised mice were fused with cells of the P3U1 myeloma cell line.

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*.

Flow Cytometry

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

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.](#)

Storage

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.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

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

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Recommended Negative Controls

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

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