

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 | <p>UniProt: Q9UGN4 Related reagents</p> <p>Entrez Gene: 11314 CD300A Related reagents</p> |
| Synonyms | CMRF35H, IGSF12 |
| RRID | AB_10960847 |
| Fusion Partners | Spleen cells from immunized mice were fused with cells of the P3U1 myeloma cell line. |
| 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> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul. |
| 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. |
| 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 |
|------------------|---------------------------------|

| | |
|--------------------------------------|--|
| 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

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

Recommended Negative Controls

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

| | | | | | |
|----------------------------------|---|------------------|---|---------------|---|
| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com | Worldwide | Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
|----------------------------------|---|------------------|---|---------------|---|

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M381248:210512'

Printed on 23 Mar 2022

© 2022 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)