

Datasheet: MCA1147G

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|----------------------|------------------------|
| Description: | RAT ANTI HUMAN CD66acd |
| Specificity: | CD66acd |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | YTH71.3 |
| 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 | ▪ | | | |
| Immunohistology - Frozen | ▪ | | | |
| Immunohistology - Paraffin | ▪ | | | 10 ug/ml |

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in his/her own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Rhesus Monkey

Does not react with: Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

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 (NaN₃)

| | |
|---------------------------------------|---|
| Carrier Free | Yes |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | Human lymphocytes |
| External Database Links | <p>UniProt:</p> <p>P13688 Related reagents</p> <p>P40198 Related reagents</p> <p>P40199 Related reagents</p> <p>Entrez Gene:</p> <p>634 CEACAM1 Related reagents</p> <p>1084 CEACAM3 Related reagents</p> <p>4680 CEACAM6 Related reagents</p> |
| Synonyms | BGP, BGP1, CD66D, CGM1, NCA |
| RRID | AB_323396 |
| Fusion Partners | Spleen cells from immunised DA rats were fused with cells of the Y3/Ag1.2.3 myeloma cell line. |
| Specificity | <p>Rat anti Human CD66acd antibody, clone YTH71.3 recognizes 3 members of the human CD66 family, namely CD66a, also known as Carcinoembryonic antigen-related cell adhesion molecule 1, Biliary glycoprotein 1 or CEACAM1. Clone YTH71.3 also recognizes CD66c, known as Carcinoembryonic antigen-related cell adhesion molecule 6 or Non-specific crossreacting antigen. In addition the clone also recognizes CD66d which in turn is also known as Carcinoembryonic antigen-related cell adhesion molecule 3 or CGM1 (Watt et al. 1991). CD66 family members are single pass, type 1 membrane glycoproteins bearing a single V-type Ig-like domain and a varying number of C2-type Ig-like domains. Clone YTH71.3 recognizes epitopes in the N-terminal domain of these CD66 family members.</p> <p>CD66 members are expressed by human neutrophils and cells of the colon where it is down regulated in some cases of colon carcinoma (Neumaier et al. 2012). CD66a is also expressed in the human alveolar adenocarcinoma cell line A549 and may play a role in <i>Moraxella catarrhalis</i> induced apoptosis of pulmonary epithelial cells in diseases including COPD and emphysema (N'Guessan et al. 2007).</p> |
| Flow Cytometry | Use 10µl of the suggested working dilution to label 1 x 10 ⁶ cells in 100µl. |
| References | <ol style="list-style-type: none"> 1. Jonker, M. <i>et al.</i> (1989) Reactivity of Mab specific for human CD markers with Rhesus monkey leucocytes. Leucocyte Typing IV p 1058-1063 Oxford University Press, Oxford. 2. Watt, S.M. <i>et al.</i> (1991) CD66 identifies a neutrophil-specific epitope within the haematopoietic system that is expressed by members of the carcinoembryonic family of |

adhesion molecules. [Blood 78: 63-74.](#)

3. Skubitz, K.M. *et al.* (1993) In Leucocyte Typing V. White Cell Differentiation Antigen p. 889 - 899 Volume One. Oxford University Press, Oxford.

4. Hill, D.J. and Virji, M. (2003) A novel cell-binding mechanism of *Moraxella catarrhalis* ubiquitous surface protein UspA: specific targeting of the N-domain of carcinoembryonic antigen-related cell adhesion molecules by UspA1. [Mol Microbiol. 48: 117-29.](#)

5. Bradley, C.J. *et al.* (2005) Critical determinants of the interactions of capsule-expressing *Neisseria meningitidis* with host cells: the role of receptor density in increased cellular targeting via the outer membrane Opa proteins [Cell Microbiol. 7: 1490-503.](#)

6. N'Guessan, P.D. *et al.* (2007) The UspA1 protein of *Moraxella catarrhalis* induces CEACAM-1-dependent apoptosis in alveolar epithelial cells. [J Infect Dis. 195: 1651-60.](#)

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: <https://www.bio-rad-antibodies.com/SDS/MCA1147G>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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| Goat Anti Rat IgG (STAR73...) | RPE |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | DyLight®550 , DyLight®650 , DyLight®800 |
| Rabbit Anti Rat IgG (STAR21...) | HRP |
| Rabbit Anti Rat IgG (STAR16...) | DyLight®800 |
| Goat Anti Rat IgG (STAR131...) | Alk. Phos. , Biotin |
| Rabbit Anti Rat IgG (STAR17...) | FITC |
| Goat Anti Rat IgG (STAR72...) | HRP |
| Goat Anti Rat IgG (STAR69...) | FITC |

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

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