

Datasheet: MCA1019F

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|----------------------|----------------------------|
| Description: | MOUSE ANTI HUMAN CD38:FITC |
| Specificity: | CD38 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | AT13/5 |
| Isotype: | IgG1 |
| Quantity: | 0.1 mg |

Product Details

RRID AB_321679

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 | ■ | | | Neat |

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species Human

Product Form Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|-----------|-------------|---------------------|-------------------|
| | FITC | 490 | 525 |

Preparation Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.1 mg/ml

Immunogen Namalwa human B-cell line.

External Database Links

UniProt:
[P28907](#) [Related reagents](#)

Entrez Gene:

[952](#) CD38 [Related reagents](#)

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

Specificity **Mouse anti Human CD38 antibody, clone AT13/5** recognizes a ~45 kDa glycoprotein and has a reactivity pattern consistent with antibodies of the CD38 cluster. CD38 is expressed by plasma cells, monocytes, early lymphoid cells and activated T cells.

CD38 is widely used to study the processes of B and T differentiation and activation. CD38 is a multifunctional enzyme involved in calcium signaling and Nicotinamide Adenine Dinucleotide (NAD⁺) metabolism ([de Oliveira et al. 2018](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood.

References

1. Malavasi, F. *et al.* (1994) Human CD38: a glycoprotein in search of a function. [Immunol Today. 15 \(3\): 95-7.](#)
2. Ellis, J.H. *et al.* (1995) Engineered anti-CD38 monoclonal antibodies for immunotherapy of multiple myeloma. [J Immunol. 155 \(2\): 925-37.](#)
3. Corcione, A. *et al.* (2009) CX3CR1 is expressed by human B lymphocytes and mediates [corrected] CX3CL1 driven chemotaxis of tonsil centrocytes. [PLoS One. 4: e8485.](#)
4. Hovden, A.O.*et al.* (2011) Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. [BMC Immunol. ;12:2.](#)
5. Tipping, A.J. *et al.* (2009) High GATA-2 expression inhibits human hematopoietic stem and progenitor cell function by effects on cell cycle [Blood. 113: 2661-72.](#)

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 18 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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