

Datasheet: MCA2633

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|----------------------|------------------------|
| Description: | MOUSE ANTI HUMAN CD276 |
| Specificity: | CD276 |
| Other names: | B7-H3 |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | MIH42 |
| Isotype: | IgG1 |
| 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 | ▪ | | | 1/10 - 1/100 |
| Immunohistology - Frozen | ▪ | | | 1/100 |
| 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) |
| Approx. Protein Concentrations | IgG concentration 1.0mg/ml |

External Database Links

UniProt:
[Q5ZPR3](#) [Related reagents](#)

Entrez Gene:[80381](#) CD276 [Related reagents](#)**Synonyms**

B7H3

Specificity

Mouse anti Human CD276 antibody, clone MIH42 detects CD276, a member of the B7 family of co-stimulatory molecules also known as B7-H3. CD276 is a type I transmembrane protein that induces the proliferation of CD4+ and CD8+ T cells, enhances the generation of cytotoxic T cells and selectively stimulates the production of interferon gamma.

Expression of CD276 can be induced on dendritic cells and monocytes by inflammatory cytokines, and is also widely expressed in peripheral tissues including the heart, kidney, testis and colon. In humans, CD276 exists as two isoforms which result from gene duplication and differential splicing.

CD276 is reported to have therapeutic potential for the regulation of cell-mediated immune responses to cancer, particularly in conjunction with anti-angiogenic therapy.

Flow Cytometry

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

Histology Positive Control Tissue

Acetone fixed Human Tonsil

References

1. Chapoval, A.I. *et al.* (2001) B7-H3: a costimulatory molecule for T cell activation and IFN-gamma production. [Nat Immunol. 2 \(3\): 269-74.](#)
2. Sun, X. *et al.* (2003) Mouse B7-H3 induces antitumor immunity. [Gene Ther. 10 \(20\): 1728-34.](#)
3. Ma, L. *et al.* (2007) Complete eradication of hepatocellular carcinomas by combined vasostatin gene therapy and B7H3-mediated immunotherapy. [J Hepatol. 46 \(1\): 98-106.](#)
4. Tjomsland, V. *et al.* (2010) Semi mature blood dendritic cells exist in patients with ductal pancreatic adenocarcinoma owing to inflammatory factors released from the tumor. [PLoS One. 5: e13441.](#)
5. Schulte, B.M. *et al.* (2015) Enterovirus-infected β -cells induce distinct response patterns in BDCA1+ and BDCA3+ human dendritic cells. [PLoS One. 10 \(3\): e0121670.](#)

Storage

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

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 (STAR76...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [HRP](#)

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

Goat Anti Mouse IgG (STAR77...) [HRP](#)

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

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Human Anti Mouse IgG1 (HCA036...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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'M312090:180119'

Printed on 04 May 2018

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