# Datasheet: MCA1582T

## BATCH NUMBER 1802

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| **Description:** | MOUSE ANTI HUMAN CD83 |
| **Specificity:** | CD83 |
| **Other names:** | HB15 |
| **Format:** | Purified |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | HB15e |
| **Isotype:** | IgG1 |
| **Quantity:** | 20 µg |

## 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 | ▪ | | | 1/50 - 1/100 |
| Immunohistology - Frozen | ▪ | | | 1/500 - 1/1000 |
| Immunohistology - Paraffin (1) | ▪ | | | 1/50 |
| Immunofluorescence | ▪ | | | |

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.

(1)**This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.**

**Target Species**

Human

**Species Cross Reactivity**

Reacts with: Cynomolgus monkey, Chimpanzee, Baboon, Rhesus Monkey, Tasmanian Devil, Sheep

**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

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| **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 |
| **Carrier Free** | Yes |
| **Approx. Protein Concentrations** | IgG concentration 1.0 mg/ml |
| **Immunogen** | Cos cells transfected with HB15 cDNA. |
| **External Database Links** | **UniProt:**<br>Q01151 Related reagents<br><br>**Entrez Gene:**<br>9308 CD83 Related reagents |
| **RRID** | AB_324789 |
| **Fusion Partners** | Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line. |
| **Specificity** | **Mouse anti Human CD83 antibody, clone HB15e** recognizes the human CD83 cell surface antigen, a 40-45 kDa glycoprotein expressed by peripheral blood dendritic cells. Peripheral lymphocytes can be induced to express very low levels of CD83 after culture in agents such as Con A or PHA.<br><br>In immunohistology CD83 is shown to be expressed strongly by interfollicular interdigitating reticulum cells and more weakly by cells within germinal centres. CD83 is also expressed by Langerhan's cells in the skin. The CD83 antigen is a 186-amino-acid single-chain glycoprotein. This molecule is a member of the immunoglobulin superfamily and is composed of an extracellular V-type Ig-like single domain, a transmembrane region, and a short, 40-amino-acid cytoplasmic tail. CD83 antigen undergoes extensive post-translational glycosylation, since the determined Mr is twice the predicted size of the core protein (Zhou *et al.* 1992).<br><br>However, CD83+ cells have a unique cell surface immuno-phenotype that does not correlate with that of T cells, B cells, NK cells, or cells of the myelomonocytic lineage (Zhou *et al.* 1995).CD83+ cells co-express the highest levels of MHC class II molecules, when compared with other leucocyte lineages. They also co-express T cell markers (CD2, CD5), B cell markers (CD40, CD78), myeloid cell markers (CD13, CD33, CD36), cytokine receptors as well as other cell surface molecules (Zhou *et al.*1995) and Zhou and Tedder 1995). |

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| **Flow Cytometry** | Use 10ul of the suggested working dilution to label $10^6$cells in 100ul. |
| **Histology Positive Control Tissue** | Human Tonsil |

**References**


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| **Storage** | Store at +4°C or at -20°C if preferred.<br><br>This product should be stored undiluted.<br><br>Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. |
| **Guarantee** | 12 months from date of despatch |
| **Health And Safety Information** | Material Safety Datasheet documentation #10040 available at:<br>https://www.bio-rad-antibodies.com/SDS/MCA1582T<br>10040 |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Secondary Antibodies

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| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC, HRP |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |

### Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

**North & South America** Tel: +1 800 265 7376
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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