# Datasheet: MCA1305GA

**BATCH NUMBER 154376**

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| **Description:** | MOUSE ANTI HUMAN CD57 |
| **Specificity:** | CD57 |
| **Format:** | Purified |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | TB01 |
| **Isotype:** | IgM |
| **Quantity:** | 0.1 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-

| | Yes | No | Not Determined | Suggested Dilution |
|---|---|---|---|---|
| Flow Cytometry | ▪ | | | 1/50 - 1/100 |
| Immunohistology - Frozen | ▪ | | | 1/10 - 1/100 |
| Immunohistology - Paraffin | ▪ | | | 1/10 - 1/50 |
| ELISA | | | ▪ | |
| Immunoprecipitation | | ▪ | | |
| Western Blotting | | ▪ | | |

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.

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| **Target Species** | Human |
| **Product Form** | Purified IgM - liquid |
| **Preparation** | Purified IgM prepared by ion exchange chromatography |
| **Buffer Solution** | Phosphate buffered saline |
| **Preservative Stabilisers** | 0.09% Sodium Azide |
| **Approx. Protein Concentrations** | IgM concentration 1mg/ml |

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| **Immunogen** | Human neuroblastoma cells. |
| **RRID** | AB_2063195 |
| **Fusion Partners** | Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3.X63 Ag8.653 myeloma cell line. |
| **Specificity** | **Mouse anti Human CD57 antibody, clone TB01** recognizes CD57, also known as HNK-1, an oligosaccharide antigenic determinant present on a variety of polypeptides, lipids and chondroitin sulphate proteoglycans. Its function is poorly understood. CD57 is present on a subset of NK and T cells. |
| **Flow Cytometry** | Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul. |
| **Immunohistology** | *This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections but sodium citrate buffer may enhance staining. |
| **Histology Positive Control Tissue** | Human tonsil |

**References**


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3. Slyker, J.A. *et al.* (2011) Phenotypic Characterization of HIV-Specific CD8 T Cells during Early and Chronic Infant HIV-1 Infection. PLoS One. 6: e20375.
4. Nunes, C. *et al.* (2012) Expansion of a CD8+PD-1+ Replicative Senescence Phenotype in Early Stage CLL Patients Is Associated with Inverted CD4:CD8 Ratios and Disease Progression. Clin Cancer Res. 18: 678-87.
5. Hutnick, N.A. *et al.* (2010) Vaccination with Ad5 Vectors Expands Ad5-Specific CD8+ T Cells without Altering Memory Phenotype or Functionality PLoS One. 5: e14385.
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7. Alejenef, A. *et al.* (2014) Cytomegalovirus drives Vδ2neg &gammaδ T cell inflation in many healthy virus carriers with increasing age. Clin Exp Immunol. 176 (3): 418-28.
8. Frahm, M. *et al.* (2012) CD4+CD8+ T cells represent a significant portion of the anti-HIV T cell response to acute HIV infection. J Immunol. 188: 4289-96.
9. Wang, Y. *et al.* (2009) Characteristics of expanded CD4+CD28null T cells in patients with chronic hepatitis B. Immunol Invest. 38: 434-46.
10. Lim, H.W. and Kim, C.H. (2007) Loss of IL-7 receptor alpha on CD4+ T cells defines terminally differentiated B cell-helping effector T cells in a B cell-rich lymphoid tissue. J Immunol. 179: 7448-56.
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12. Slyker, J.A. *et al.* (2012) The impact of HIV-1 infection and exposure on natural killer (NK) cell phenotype in Kenyan infants during the first year of life. Front Immunol. 3: 399.
13. Perlingeiro Beltrame, M. *et al.* (2014) Immune reconstitution in patients with Fanconi

anemia after allogeneic bone marrow transplantation. Cytotherapy. 16: 976-89.
14. Suárez, G.M. *et al.* (2021) Associations among cytokines, EGF and lymphocyte subpopulations in patients diagnosed with advanced lung cancer. Cancer Immunol Immunother. Jan 02 [Epub ahead of print].

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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** | Material Safety Datasheet documentation #10040 available at: |