

TECHNICAL DATA SHEET

CyFlow™ HLA-DR1 (empty) PE Anti-Hu; Clone MEM-267

REF CM093224

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

| | |
|------------------------------------|---|
| Antigen | HLA-DR1 (empty) |
| Alternative Names | — |
| Clone | MEM-267 |
| Clonality | monoclonal |
| Format | PE |
| Host / Isotype | Mouse / IgG2b |
| Species Reactivity | Human |
| Negative Species Reactivity | — |
| Quantity [Concentration] | 0.1 mg [0.1 mg/ml] |
| Immunogen | Purified, insoluble DR1 β chain (DRB1*0101) expressed in E. coli inclusion bodies |

Contact Information:

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Specificity

The mouse monoclonal antibody MEM-267 specifically binds to the empty but not peptide-loaded form of HLA-DR1. DR is the isotypes of human MHC Class II molecules expressed on antigen-presenting cells (APC; dendritic cells, B lymphocytes, monocytes, macrophages).

Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 5 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

| | |
|------------------|---|
| Storage | Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze. |
| Stability | Do not use after expiration date stamped on vial label. |

Background Information

HLA-DR1 belongs to the HLA class II β chain paralogues. The MHC Class II molecule is a heterodimer consisting of an α (DRA) and a β chain (DRB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. MHC Class II molecules are expressed in antigen presenting cells (APC). The β chain is approximately 26-28 kDa. Within the DR molecule the β chain contains all the polymorphisms specifying the peptide binding specificities. Hundreds of DRB1 alleles have been described and typing for these polymorphisms is routinely done for bone marrow and kidney transplantation.

References

- Carven GJ, Chitta S, Hilgert I, Rushe MM, Baggio RF, Palmer M, Arenas JE, Strominger JL, Horejsi V, Santambrogio L, Stern LJ: Monoclonal antibodies specific for the empty conformation of HLA-DR1 reveal aspects of the conformational change associated with peptide binding. J Biol Chem. 2004 Apr 16; 279(16):16561-70. < PMID: 14757758 >

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- Potoicchio I, Chitta S, Xu X, Fonseca D, Crisi G, Horejsi V, Strominger JL, Stern LJ, Raposo G, Santambrogio L: Conformational variation of surface class II MHC proteins during myeloid dendritic cell differentiation accompanies structural changes in lysosomal MIIC. J Immunol. 2005 Oct 15; 175(8):4935-47. < PMID: 16210595 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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