

**PE Mouse Anti-human HLA-DR/DP Antibody**  
**\*MEM-136, monoclonal\***Catalog number: V1031035  
Unit size: 100 tests**Product Details**

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Storage Conditions | 2-8°C with minimized light exposure. Do not freeze.                         |
| Expiration Date    | 12 months upon receiving                                                    |
| Concentration      | Lot specific (please consult certificate of analysis for given lot)         |
| Formulation        | Phosphate-buffered saline (PBS, pH 7.2), 15 mM sodium azide, 0.2% (w/v) BSA |

**Antibody Properties**

|                    |            |
|--------------------|------------|
| Species Reactivity | Human      |
| Class              | Primary    |
| Clonality          | Monoclonal |
| Host               | Mouse      |
| Immunogen          | HLA-DR/DP  |
| Clone              | MEM-136    |
| Conjugate          | PE         |

**Biological Properties**

|             |                                                                                                   |
|-------------|---------------------------------------------------------------------------------------------------|
| Preparation | Antibody purified by affinity chromatography and then conjugated with PE under optimal conditions |
| Application | FC (QC TESTED)                                                                                    |

**Applications**

HLA class II histocompatibility antigen  $\gamma$  chain (sometimes referred to as Ia antigen-associated invariant chain, HLA-DR antigens-associated invariant chain, Ii or p33) is a transmembrane protein with a molecular weight of 39 kDa, found in the trans-Golgi network membrane, integral component of membrane and nucleus of cells. Sequencing of HLA class II histocompatibility antigen  $\gamma$  chain has exemplified it contains 3 conserved structural units: cytoplasmic, thyroglobulin type-1 and extracellular domain. p33 is thought to be essential to macrophage activation. It recognizes CD4 receptor, identical protein and MHC class II protein complex. It aids in organismal processes, for example, cell population proliferation, chaperone cofactor-dependent protein refolding and negative thymic T cell selection. HLA class II histocompatibility antigen  $\gamma$  chain positively regulates fibroblast proliferation, kinase activity and MAPK cascade. And it also is involved in the negative regulation of T cell differentiation, mature B cell apoptotic process and apoptotic process. HLA class II histocompatibility antigen  $\gamma$  chain is the subject of extensive application in part because of the fact that it is a component of the positive regulation of cytokine-mediated signaling pathway, positive regulation of macrophage migration inhibitory factor signaling pathway and negative regulation of intrinsic apoptotic signaling pathway in response to DNA damage by p53 class mediator, and furthermore, has been thought to be involved with critical functions such as cytokine receptor activity.