

TECHNICAL DATA SHEET

CyFlow™ CD205 PE Anti-Hu; Clone HD30

REF AB042675

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD205
Alternative Names	DEC-205, CLEC13B, GP200-MR6, lymphocyte Ag 75
Clone	HD30
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Recombinant Fc-tagged human CD205

Specificity

The mouse monoclonal antibody HD30 recognizes CD205 antigen, a 200 kDa C-type lectin transmembrane protein of the MMR (macrophage mannose receptor) family, expressed at high levels on dendritic cells and thymic epithelial cells, and at low levels on lymphocytes, NK cells and monocytes.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

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

CD205 (DEC-205) is an endocytic receptor of macrophage mannose receptor family. This 205 kDa C-type lectin transmembrane protein mediates adsorptive uptake and its intracellular domain contains coated pit localization sequence and distal acidic motif, which is required for recycling beyond early endosomes through deeper MHC II+ late endosomes and lysosomes. This unique pathway of receptor-mediated uptake proves to be necessary for presentation of antigenic peptides at low doses of ligand. CD205 is responsible for uptake and processing of captured antigens for dendritic cells.

References

- Guo M, Gong S, Maric S, Misulovin Z, Pack M, Mahnke K, Nussenzweig MC, Steinman RM: A monoclonal antibody to the DEC-205 endocytosis receptor on human dendritic cells. Hum Immunol. 2000 Aug; 61(8):729-38. < PMID: 10980384 >
- Mahnke K, Guo M, Lee S, Sepulveda H, Swain SL, Nussenzweig M, Steinman RM: The dendritic cell receptor for endocytosis, DEC-205, can recycle and enhance antigen presentation via major histocompatibility complex class II-positive lysosomal compartments. J Cell Biol. 2000 Oct 30; 151(3):673-84. < PMID: 11062267 >

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- Gurer C, Strowig T, Brilot F, Pack M, Trumpfheller C, Arrey F, Park CG, Steinman RM, Münz C: Targeting the nuclear antigen 1 of Epstein-Barr virus to the human endocytic receptor DEC-205 stimulates protective T-cell responses. Blood. 2008 Aug 15; 112(4):1231-9. < PMID: 18519810 >
- Park CG, Rodriguez A, Ueta H, Lee H, Pack M, Matsuno K, Steinman RM: Generation of anti-human DEC205/CD205 monoclonal antibodies that recognize epitopes conserved in different mammals. J immunol Methods. 2012 Mar 30; 377(1-2):15-22. < PMID: 22273672 >

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

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