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Biotinylated Monoclonal Antibody To Mouse CD205

Marker For Mouse Nonlymphoid Dendritic Cells, DEC-205

Monoclonal antibody NLDC-145 identifies Ia positive interdigitating cells, veiled cells and Langerhans cells of the skin and their *in vitro* counterparts. The antigen is expressed at high levels by dendritic cells and thymic epithelial cells. The antigen detected by NLDC-145 is an integral membrane glycoprotein with an apparent mass of 205kDa, also known as DEC-205. DEC-205 is apparently a receptor involved in antigen-processing by dendritic cells.

This antibody was produced serum-free, without fetal calf serum.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product Number:	T-2025 (Lot 05PB1408)
Clone:	NLDC-145
Host species, isotype:	Rat IgG2a
Quantity:	150µg
Format:	Affinity purified, biotinylated, lyophilized Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.3mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.05% (v/v) Kathon™ CG as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C from date of purchase. Stock solution or aliquots thereof: 1 year at -20°C. Avoid freeze-thaw cycles.
Applications:	Tested for immunohistochemistry (IHC); has also been described to work in FACS. **Approximate working dilution for IHC:** Frozen sections: 3µg/ml (1:100) Paraffin sections: does not react on routinely processed paraffin sections. Optimal dilutions should be determined by the end user. Suggested positive control: Mouse spleen. Please see **www.bma.ch** for protocols and general information.
Immunogen:	Mouse lymph node tissue
Protein database:	mouse-Q60767
Antigen, epitope:	The antigen is a protein of 205kDa molecular weight (DEC-205) which is localized on the cell surface and

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intracellularly. The epitope has not been further characterized.

Antigen distribution:

Organ	NLDC-145 staining	Cell type and localization
Spleen	+	IDC in inner PALS
Lymph node	+	IDC in paracortex VC in subcapsular sinus
Peyer's patch	+	IDC in interfollicular T cell areas Villum epithelium, isolated cells in submucosa (VC)
Thymus	+	IDC in medulla Cortical epithelium
Skin	+	Langerhans cells
Brain, Kidney, Liver, Heart	-	
In vitro isolated cells		
Blood, bone marrow	-	
Peritoneal cells	-	
Peritoneal exudate cells*	+	some positive cells (VC?)

* Peritoneal exudate cells were harvested 4 days after intraperitoneal thioglycollate injection.
Tests were carried out on BALB/c and $C_3D_2F_1$ mouse strains.
(G.Kraal et al. see ref. 1, modified)

Specificity:

Mouse: nonlymphoid dendritic cells: interdigitating cells (IDC), veiled cells and Langerhans cells, thymic epithelial cells.

Other species: not tested.

Selected references

Kraal, G., M. Breel, M. Janse, G. Bruin: Langerhans' cells, veiled cells, and interdigitating cells in the mouse recognized by a monoclonal antibody. J Exp Med **163**: 981-987 (1986)

Breel, M., R.E. Mebius, G. Kraal: Dendritic cells of the mouse recognized by two monoclonal antibodies. Eur J Immunol **17**: 1555-1559 (1987).

Swiggard, W.J., A. Mirza, M.C. Nussenzweig, R.M. Steinman: DEC-205, a 205kDa protein abundant on mouse dendritic cells and thymic epithelium that is detected by the monoclonal antibody NLDC-145: purification, characterization, and N-terminal amino acid sequence. Cellular Immunology **165**, 302-311 (1995).

Martinez del Hoyo, G., P. Martín, H. Hernández Vargas, S. Ruiz, C. Fernández Arias, C. Ardavín:

For in vitro research only. This product contains Kathon™ CG as a preservative.

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