

## **Product datasheet for BM4017**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Ly75 Rat Monoclonal Antibody [Clone ID: NLDC-145]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: NLDC-145
Applications: FC, IHC

Recommended Dilution: Immunohistochemistry on Frozen Sections: 0.5 µg/ml (1/400).

**Recommended Positive Control**: Mouse spleen.

Does not react on routinely processed paraffin sections.

Has been described to work in FACS.

Reactivity: Mouse
Host: Rat
Isotype: IgG2a

Clonality: Monoclonal

**Immunogen:** Mouse lymph node tissue.

Specificity: Reacts with nonlymphoid dendritic cells: interdigitating cells (IDC), veiled cells and Langerhans

cells, thymic epithelial cells.

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.

**Formulation:** PBS, pH 7.2

State: Purified

State: Lyophilized purified IgG fraction

Stabilizer: 5 mg/ml BSA

Preservative: 0.05% (v/v) Kathon CG

**Reconstitution Method:** Restore by adding 0.5 ml distilled water.

**Concentration:** 0.2 mg/ml (after reconstitution)

**Purification:** Affinity Chromatography

Conjugation: Unconjugated





### Ly75 Rat Monoclonal Antibody [Clone ID: NLDC-145] - BM4017

**Storage:** Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Gene Name: lymphocyte antigen 75

Database Link: Entrez Gene 17076 Mouse

Q60767

**Background:** Mouse CD205, also known as DEC-205 (dendritic and epithelial cells, 205 kDa). CD205 is an

integral membrane glycoprotein involved in antigen uptake, trafficking and presentation that improves the induction of antigen-specific T cell immunity. CD205 is highly expressed by CD8+ dendritic cells (DCs) and also expressed at different levels by bone marrow Gr1+ cells,

Langerhans cells, (BMDC) bone marrow derived DCs and thymic epithelial cells. DEC-205 is apparently a receptor involved in antigen-processing by dendritic cells.

Synonyms: LY75, CLEC13B, DEC205, gp200-MR6

Note: Protocol: Protocol with frozen, ice-cold acetone-fixed sections:

The whole procedure is performed at room temperature

1. Wash in PBS

2. Block endogenous peroxidase

3. Wash in PBS

4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber

5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber

6. Wash in PBS

7. Incubate with secondary antibody (peroxidase-conjugated goat anti rat IgG (H+L) minimal-cross reaction to mouse) for 1h in a humid chamber

8. Wash in PBS

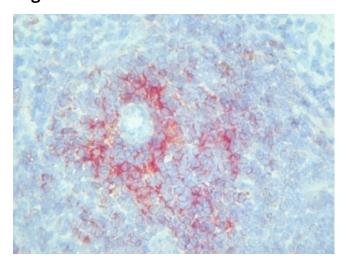
9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.

10. Wash in PBS

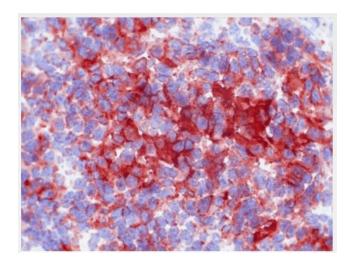
11. Counterstain with Mayer's hemalum.



# **Product images:**



Mouse Spleen Frozen Section stained with CD205 Antibody (Clone NLDC-145).



Mouse Spleen Frozen Section stained with CD205 Antibody (Clone NLDC-145).



#### 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?)

<sup>\*</sup> Peritoneal exudate cells were harvested 4 days after intraperitoneal thioglycollate injection.

Tests were carried out on BALB/c and C<sub>3</sub>D<sub>2</sub>F<sub>1</sub> mouse strains.

(G.Kraal et al. see ref. 1, modified)