Monoclonal Antibody CD208 (DC-LAMP)

PN IM3448 – Purified – Liquid 1 mL – 0.2 mg – Clone 104.G4

For Research Use Only. Not for use in diagnostic procedures.

SPECIFICITY

The CD208 antigen (70 – 90 kDa), also known as DC-LAMP antigen, is a member of the lysosome-associated membrane protein (LAMP) family (1). As other LAMP members such as CD68, the CD208 antigen is a type I integral membrane protein of 416 amino acid residues, highly glycosylated (7 N- and some O-glycosylation sites), with 90% of the molecule located in the lumen of lysosome (1). CD208 is specifically expressed by those mature dendritic cells (DC) located in T cell areas of lymphoid tissues, which are known as interdigitating dendritic cells (IDC) (1 – 3). A direct correlation between the expression of CD208 and that of other maturation markers such as CD86 has been established. The CD208 antigen first appears in the MHC Class II compartment, suggesting an important contribution of CD208 to the processing of exogenous antigens (1).
The 104.G4 mAb exclusively stains IDCs in lymphoid tissues, as demonstrated with immunohistochemistry. In flow cytometry, 104.G4 shows an intracytoplasmic staining of DCs derived either from $CD34^+$ cell cultures activated with TNF-α, CD40L and FasL, or from monocyte cultures activated with TNF-α, LPS and CD40L (1 – 6).

The 104.G4 has been assigned to the CD208 cluster of differentiation at the 7th International Workshop on Human Leucocyte Differentiation Antigens in Harrogate, England, in 2000 (7).

REAGENT

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Clone	104.G4
Isotype	IgG1
Immunogen	Human recombinant E02B02
Hybridoma	SP2/0 x Balb/c
Species	Mouse
Source	ascites fluid
Purification	Ion exchange or affinity chromatography

REAGENT CONTENTS

2 mg/mL bovine serum albumin in phosphate-buffered saline and 0.1% sodium azide as preservative.

STATEMENT OF WARNINGS

1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.
2. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
4. Do not use reagent beyond the expiration date on the vial label.
5. Avoid microbial contamination of reagent or erroneous results may occur.
6. Use good laboratory practices when handling this reagent.

STORAGE CONDITIONS AND STABILITY

This reagent is stable up to the expiration date on the vial label when stored at 2 – 8°C. Minimize exposure to warmth.

REAGENT PREPARATION

No reconstitution is necessary.

APPLICATIONS

Immunohistochemistry on frozen tissue sections.
Immunoprecipitation.
Flow cytometry after cellular permeabilisation.

For each application, it is recommended to establish the right range of antibody dilutions to be used for the experiment.

SELECTED RESEARCH REFERENCES

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3. Steinman, R.M., Pack, M., Inaba, K., "Dendritic cells in the T-cell areas of lymphoid organs", 1997, Immunol. Rev., 156, 25-37.
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5. Rescigno, M., Piguet, V., Valzasina, B., Lens, S., Zubler, R., French, L., Kindler, V., Tschopp, J., Ricciardi-Castagnoli, P., "Fas engagement induces the maturation of dendritic cells (DCs), the release of interleukin (IL)-1β, and the production of interferon γ in the absence of IL-12 during DC-T cell cognate interaction: A new role for fas ligand in inflammatory responses", 2000, J. Exp. Med., 192, 1661-1668.
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7. Lebecque, S., de Saint-Vis, B., "CD208 (DC-LAMP) workshop Report", 2002, Leucocyte Typing VII, White Cell Differentiation Antigens. D. Mason, et al., Eds., Oxford University Press, 308-309.

PRODUCT AVAILABILITY

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For additional information in the USA, call 800-526-7694.
Outside the USA, contact your local Beckman Coulter representative.
www.beckmancoulter.com

TRADEMARKS

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