Purified Anti-Mouse Follicular Dendritic Cells Monoclonal Rat Antibody

Code:	212-MK-1FDCM2	***Lot no.:***	12972
Clone:	FDC-M2	***Exp:***	1 year from date of despatch
Isotype:	Rat IgG2a		

Quantity: 100 µg (0.1 ml) purified antibody buffered in PBS (pH 7.4) containing 0.1% (w/v) sodium azide.

Source: Tissue culture supernatant

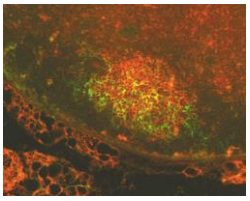
Purification: Affinity chromatography

Specificity: This antibody reacts with mouse follicular dendritic cells [1-5]. Recently, the epitope recognized by FDC-M2 has been demonstrated to be an activation form of the complement fragment, C4 [6].

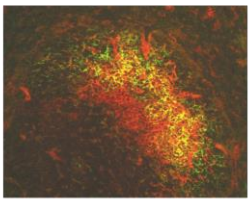
Applications: This antibody is useful to elucidate the role of the Follicular Dendritic Cell (FDC) network in immune responses. It has been used extensively to study mechanisms involved in humoral immunity, such as maturation of B cells, formation of germinal centers and the biology of follicular dendritic cells (immunohistochemistry of frozen tissue sections). In addition, it has been used in the murine model of Scrapie in order to unravel the characteristics of this prion related disease.

This antibody may be used for immunohistochemistry of frozen tissue sections. It does not stain paraffin embedded tissue sections.

We recommend that each laboratory determine an optimum working titre for use in its particular application.



a



b

Figure: Immunolabelling of the FDC network in cryosections of lymph node (a) and spleen (b) using FDC-M2. Mice immunized with ovalbumin in alum on day 0 and 14. Lymph nodes and spleen obtained on day 19 (i.e. day 5 post secondary immunization). The germinal centre is labelled with plant lectin, peanut agglutinin (PNA; red colour). FDC-M2 is clearly restricted to the FDC network both within the germinal centre (green plus red = yellow) as well as extending out into the primary follicle (green).

References:

1. Kosco-Vilbois M.H. et al. " To 'B' or not to 'B' a germinal center?" Immunology Today 18:25 (1997)

2. Alimzhanov B, et al. "Abnormal development of secondary lymphoid tissues in lymphotoxin β-deficient mice" Proc. Natl Acad. Sci 94: 9302 (1997)

3. Gonzales M., et al. "The Sequential Role of Lymphotoxin and B Cells in the Development of Splenic Follicles" J. Exp. Medicine 187: 997 (1998)

4. Camach, S.A., M.H. Kosco-Vilbois and C. Berek "The dynamic structure of the germinal center" Immunology Today 19: 511 (1998)

5. Kosco-Vilbois M.H., et al. "Follicular dendritic cell-dependent adhesion and proliferation of B cells in vitro" J. Immunol. 148: 2331-2339 (1992)

6. Taylor, P.R., M.C. Pickering, M.H. Kosco-Vilbois, M.J. Walport, M Botto, S. Gordon and L Martinez-Pomares (2002) Detection of C4 activation fragments with Mab209 (FDC-M2); localization of immune complexes in mouse tissues. Eur. J.Immunol., 32: 1888-1896.

Storage: For use within 1 month store at +4°C, for long term storage aliquot antibody into small volumes and store at -20°C. Avoid repeated freeze thaw cycles.

For Research Use Only, Not For Diagnostic or Therapeutic Use.

Rev. Sep-15

UK & Rest of World
184 Milton Park, Abingdon
OX14 4SE, Oxon, UK
Tel: +44 (0) 1235 828 200
Fax: +44 (0) 1235 820 482

United States
1035 Cambridge Street
Cambridge, MA 02141
Tel: + 1 800 987 0985
Fax: + 1 617.945.8218

Switzerland
Centro Nord-Sud 2E
CH-6934 Bioggio-Lugano
Tel: +41 (0) 91 604 55 22
Fax: +41 (0) 91 605 17 85

Deutschland
Bockenheimer Landstr. 17/19
60325 Frankfurt/Main
Tel: +49 (0) 69 779099
Fax: +49 (0) 69 13376880