ICAM-1 (1A29): sc-19584

BACKGROUND

Cell adhesion molecules are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth and are thought to play important, yet separate, roles in embryogenesis and development. The intracellular adhesion molecule-1 (ICAM-1), also referred to as CD54, is an integral membrane protein of the immunoglobulin superfamily and recognizes the β2α1 and β2αM integrins. ICAM-2 functions as a ligand for lymphocyte function-associated antigen-1 (LFA-1) and is involved in leukocyte adhesion. ICAM-3 is highly expressed on the surface of human eosinophils, and when bound to ligand may inhibit eosinophil inflammatory responses and survival. ICAM-4, also known as LW glycoprotein, interacts with the integrins αLβ2, αMβ2, the αV family and αllβ3, and selective binding to different integrins may be relevant to the pathology in a number of red blood cell associated diseases. Lastly, ICAM-5, expressed on telencephalic neurons, binds CD11a/CD18 and thus may act as an adhesion molecule for leukocyte binding in the central nervous system.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: ICAM1 (human) mapping to 19p13.2; Icam1 (mouse) mapping to 9 A3.

SOURCE

ICAM-1 (1A29) is a mouse monoclonal antibody raised against a suspension of HEV-derived Ax cell line of rat origin.

PRODUCT

Each vial contains 200 µg IgG1, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for blocking, sc-19584 L, 200 µg/0.1 ml.

ICAM-1 (1A29) is available conjugated to either phycoerythrin (sc-19584 PE) or fluorescein (sc-19584 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

ICAM-1 (1A29) is recommended for detection of ICAM-1 of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).


RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Immunofluorescence: use m-IgGx BP-FITC: sc-516140 or m-IgGx BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 2) Immunohistochemistry: use m-IgGx BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

ICAM-1 (1A29): sc-19584. Immunoperoxidase staining of formalin fixed, paraffin-embedded rat lung tissue showing membrane and cytoplasmatic staining of pneumocytes and cytoplasmatic staining of macrophages.

SELECT PRODUCT CITATIONS


STORAGE

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

CONJUGATES

See ICAM-1 (G-5): sc-8439 for ICAM-1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, B80 and 790.