**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 β2/α1 and β2/αM Integins. 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 and may be relevant to the pathology in a number of red blood cell associated diseases. Lastly, ICAM-5, expressed on telencephalic neurons, binds αL/β2, αβ4/β2, αβ2/β2, and αβV family and αβlbβ3, and selective binding to different integrins may be relevant to the pathology in a number of red blood cell associated diseases. ICAM-5 is highly expressed on the surface of human eosinophils and, when bound to ligand, may inhibit eosinophil inflammatory responses and survival.

**APPLICATIONS**

ICAM-1 (15.2) is recommended for detection of ICAM-1 of mouse, rat and human origin by Western blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], 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 10^6 cells).

Suitable for use as control antibody for ICAM-1 siRNA (h): sc-29354, ICAM-1 siRNA (m): sc-29355, ICAM-1 shRNA Plasmid (h): sc-29354-SH, ICAM-1 shRNA Plasmid (m): sc-29355-SH, ICAM-1 shRNA (h) Lentiviral Particles: sc-29354-V and ICAM-1 shRNA (m) Lentiviral Particles: sc-29355-V.

Molecular Weight of ICAM-1: 85-110 kDa.

**CHROMOSOMAL LOCATION**

Genetic locus: ICAM1 (human) mapping to 19p13.2; Icam1 (mouse) mapping to 11a/CD18 and thus may act as an adhesion molecule for leukocyte binding in the central nervous system.

**SOURCE**

ICAM-1 (15.2) is a mouse monoclonal antibody raised against an ICAM-1 positive cell preparation.

**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 biological studies, sc-107 L, 200 μg/0.1 ml.

ICAM-1 (15.2) is available conjugated to agarose (sc-107 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-107 HR P), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-107 PE), fluorescein (sc-107 FITC), Alexa Fluor® 488 (sc-107 AF488), Alexa Fluor® 546 (sc-107 AF546), Alexa Fluor® 594 (sc-107 AF594) or Alexa Fluor® 647 (sc-107 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-107 AF680) or Alexa Fluor® 790 (sc-107 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, ICAM-1 (15.2) is available conjugated to either PerCP (sc-107 PerCP), PerCP-Cy5.5 (sc-107 PCPC5) or Alexa Fluor® 405 (sc-107 AF405), 100 tests in 2 ml, for IF, IHC(P) and FCM.

**STORAGE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.