**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 an important role in embryogenesis and development. Neuronal cell adhesion molecule (NCAM) expression is observed in a variety of human tumors including neuroblastomas, rhabdomyosarcomas, Wilms' tumors, Ewing's sarcomas and some primitive myeloid malignancies. The intracellular adhesion molecule-1 (ICAM-1), also referred to as CD54, is an integral membrane protein of the immunoglobulin superfamily and recognizes the B2α1 and B2αM integrins. PECAM-1 (platelet/endothelial cell adhesion molecule-1), also referred to as CD31, is a glycoprotein expressed on the cell surfaces of monocytes, neutrophils, platelets and a subpopulation of T cells. VCAM-1 (vascular cell adhesion molecule-1) was first identified as an adhesion molecule induced on human endothelial cells by inflammatory cytokines such as IL-1, tumor necrosis factor (TNF) and lipopolysaccharide (LPS). The KALIG gene encodes a nerve cell adhesion molecule (NCAM)-like protein and is deleted in 66% of patients with Kallmann's syndrome, anosmia with secondary hypogonadism.

**CHROMOSOMAL LOCATION**

Genetic locus: VCAM1 (human) mapping to 1p21.2; Vcam1 (mouse) mapping to 3G1.

**SOURCE**

VCAM-1 (E-10) is a mouse monoclonal antibody raised against amino acids 25-300 of VCAM-1 of human 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.

VCAM-1 (E-10) is available conjugated to agarose (sc-13160 AC), 500 µg/0.25 ml agarose in 1 ml, for WB, HICP and ELISA; to either phycoerythrin (sc-13160 PE), fluorescein (sc-13160 FITC), Alexa Fluor® 488 (sc-13160 AF488), Alexa Fluor® 594 (sc-13160 AF594) or Alexa Fluor® 647 (sc-13160 AF647), 200 µg/ml, for IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-13160 AF680) or Alexa Fluor® 790 (sc-13160 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, VCAM-1 (E-10) is available conjugated to either PerCP (sc-13160 PerCP), PerCP-Cy5.5 (sc-13160 PCPC5) or Alexa Fluor® 405 (sc-13160 AF405), 100 tests in 2 ml, for IF, HICP and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**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 website at www.scbt.com for detailed protocols and support products.

**APPLICATIONS**

VCAM-1 (E-10) is recommended for detection of VCAM-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for VCAM-1 siRNA (h): sc-29519, VCAM-1 siRNA (m): sc-36810, VCAM-1 shRNA Plasmid (h): sc-29519-Sh, VCAM-1 shRNA Plasmid (m): sc-36810-Sh, VCAM-1 shRNA (h) Lentiviral Particles: sc-29519-V and VCAM-1 shRNA (m) Lentiviral Particles: sc-36810-V.

Molecular Weight of VCAM-1: 110 kDa.

Positive Controls: VCAM-1 (h): 293T Lysate: sc-178116 or SolB cell lysate: sc-2249.

**DATA**

VCAM-1 (E-10) sc-13160. Western blot analysis of VCAM-1 expression in human endothelial cells. (A) and human VCAM-1 transfected sc-178116 (B) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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