

ICAM-3 (CG106): sc-53338

BACKGROUND

Cell adhesion molecules (CAMs) are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth. These proteins are thought to play an important role in embryogenesis and development. ICAM-3, also designated CD50 and ICAM-R, is a type I membrane protein that is thought to regulate morphological changes during cell locomotion. ICAM-3 acts as a counter-receptor for the leukocyte Integrin $\alpha L/\beta 2$, and is known to activate T cells and polymorphonuclear leukocytes. ICAM-3 also binds to Moesin, via the cytoplasmic domain of ICAM-3. The expression of ICAM-3 is induced by RANTES, a chemoattractant known to activate T lymphocytes. ICAM-3 is also a major ligand for the leukocyte Integrin LFA-1 (CD11a/CD18).

CHROMOSOMAL LOCATION

Genetic locus: ICAM3 (human) mapping to 19p13.2.

SOURCE

ICAM-3 (CG106) is a mouse monoclonal antibody raised against T lymphoblastic cells of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ICAM-3 (CG106) is available conjugated to agarose (sc-53338 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53338 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53338 PE), fluorescein (sc-53338 FITC), Alexa Fluor® 488 (sc-53338 AF488), Alexa Fluor® 546 (sc-53338 AF546), Alexa Fluor® 594 (sc-53338 AF594) or Alexa Fluor® 647 (sc-53338 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53338 AF680) or Alexa Fluor® 790 (sc-53338 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

ICAM-3 (CG106) is recommended for detection of ICAM-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for ICAM-3 siRNA (h): sc-35628, ICAM-3 shRNA Plasmid (h): sc-35628-SH and ICAM-3 shRNA (h) Lentiviral Particles: sc-35628-V.

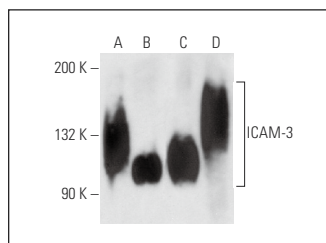
Molecular Weight of ICAM-3: 110-160 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Jurkat whole cell lysate: sc-2204 or CCRF-CEM cell lysate: sc-2225.

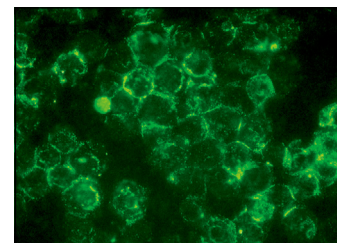
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

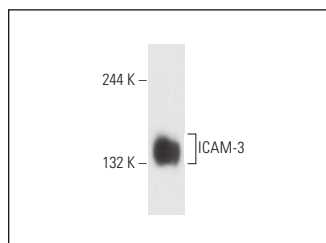
DATA



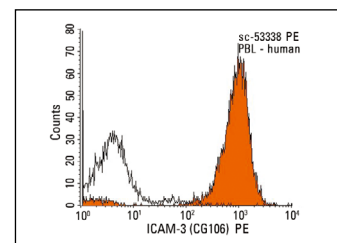
ICAM-3 (CG106): sc-53338. Western blot analysis of ICAM-3 expression in HL-60 (A), Jurkat (B), CCRF-CEM (C) and human PBL (D) whole cell lysates under non-reducing conditions.



ICAM-3 (CG106): sc-53338. Immunofluorescence staining of methanol-fixed Jurkat cells showing membrane localization.



ICAM-3 (CG106): sc-53338. Western blot analysis of ICAM-3 expression in U-937 whole cell lysate.



ICAM-3 (CG106): sc-53338. Indirect FCM analysis of human peripheral blood leukocytes stained with ICAM-3 (CG106), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG_{2a}: sc-3878.

RESEARCH USE

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

PROTOCOLS

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