

# ICAM-3 (F-11): sc-365456

## 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).

## REFERENCES

1. Fawcett, J., et al. 1992. Molecular cloning of ICAM-3, a third ligand for LFA-1, constitutively expressed on resting leukocytes. *Nature* 360: 481-484.
2. Serrador, J.M., et al. 1997. Moesin interacts with the cytoplasmic region of intercellular adhesion molecule-3 and is redistributed to the uropod of T lymphocytes during cell polarization. *J. Cell Biol.* 138: 1409-1423.
3. Szabo, M.C., et al. 1997. RANTES stimulation of T lymphocyte adhesion and activation: role for LFA-1 and ICAM-3. *Eur. J. Immunol.* 27: 1061-1068.
4. Hayflick, J.S., et al. 1998. The intercellular adhesion molecule (ICAM) family of proteins. New members and novel functions. *Immunol. Res.* 17: 313-327.
5. Bell, E.D., et al. 1998. The leukocyte function-associated antigen-1 (LFA-1)-binding site on ICAM-3 comprises residues on both faces of the first immunoglobulin domain. *J. Immunol.* 161: 1363-1370.
6. Feldhaus, M.J., et al. 1998. Engagement of ICAM-3 activates polymorphonuclear leukocytes: aggregation without degranulation or  $\beta$ 2 integrin recruitment. *J. Immunol.* 161: 6280-6287.

## CHROMOSOMAL LOCATION

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

## SOURCE

ICAM-3 (F-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 25-53 near the N-terminus of ICAM-3 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-365456 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## STORAGE

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

## APPLICATIONS

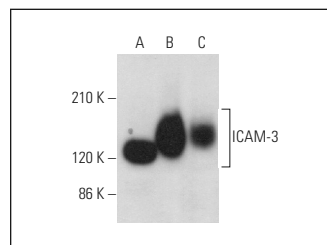
ICAM-3 (F-11) is recommended for detection of ICAM-3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

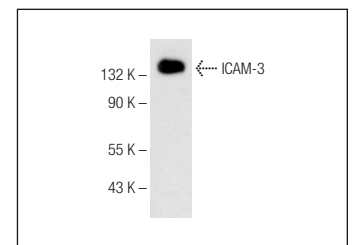
Molecular Weight of ICAM-3: 110-160 kDa.

Positive Controls: THP-1 cell lysate: sc-2238, Jurkat whole cell lysate: sc-2204 or HL-60 whole cell lysate: sc-2209.

## DATA



ICAM-3 (F-11): sc-365456. Western blot analysis of ICAM-3 expression in Jurkat (A), HL-60 (B) and THP-1 (C) whole cell lysates.



ICAM-3 (F-11): sc-365456. Western blot analysis of ICAM-3 expression in Jurkat whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.