

PRODUCT DESCRIPTION

Mouse soluble ICAM-1 is a recombinant protein derived from the cell adhesion molecule ICAM-1 (CD54). ICAM-1 has a molecular mass of approximately 95 kDa. It is a membrane protein expressed on many cell types and its expression is upregulated upon cell activation. It binds to two integrins on leukocytes, namely LFA-1 and Mac-1. Cell adhesion mediated by these molecules is critical for a wide range of cellular interactions in the immune system, including leukocyte adhesion to endothelial cells and interaction between T cells and antigen-presenting cells. The adhesion of leukocytes to ICAM-1 requires functional activation of LFA-1 or Mac-1 on leukocytes. Purified sICAM-1 adsorbed to a solid support binds activated cells expressing LFA-1 or Mac-1, but not resting cells. This binding can be blocked by the monoclonal anti-ICAM-1 antibody (in mouse with clone YN1/1; Catalog #01503), anti-LFA-1 or anti-Mac-1, indicating a direct interaction of these molecules in cell adhesion. Soluble ICAM-1 is useful for the studies of the activation of leukocyte adhesion in immune responses and inflammatory reactions.

SOURCE

Soluble ICAM-1 is produced in NS-1 cells.

FORMAT

Supplied in phosphate buffered saline. Does not contain sodium azide.

Concentration will vary from lot to lot. Please refer to Table 1 for lot-specific concentration. If your lot number differs from those shown, please contact STEMCELL Technologies for information specific to your protein.

Table 1. Lot-specific protein concentrations

LOT NUMBER	CONCENTRATION
12M47177	630 µg/mL
14G57963	630 µg/mL

STABILITY AND STORAGE

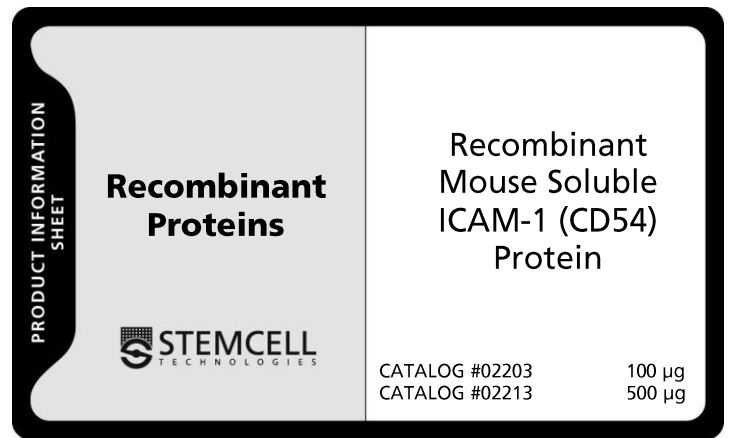
Product stable at -20°C (-25°C to -15°C) until expiry date indicated on label.

Avoid repeated freezing and thawing.

APPLICATIONS AND DIRECTIONS FOR USE

Centrifuge tube briefly before use to ensure recovery of entire contents.

This protein can be used for immunoprecipitation, blocking studies and is suitable for Western blotting if proteins are separated under non-reducing conditions.



REFERENCES

1. Horley KJ, Carpenito C, Baker B, Takei F: Molecular cloning of mouse intercellular adhesion molecule (ICAM). EMBO J 8: 2889, 1989
2. Welder CA, Lee DH, Takei F: Inhibition of cell adhesion by microspheres coated with recombinant soluble intercellular adhesion molecule-1. J Immunol 150: 2203-2210, 1993
3. Takei F: Inhibition of mixed lymphocyte response by rat monoclonal antibody to a novel murine lymphocyte antigen (MALA-2). J Immunol 134: 1403-1407, 1985

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