



Recombinant Protein Technical Manual
Recombinant Human CD50/ICAM-3 Protein (His & Fc
Tag)(Active)
RPES4247

Product Data:

Product SKU: RPES4247

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_002153.2

Protein Information:

Molecular Mass: 77.2 kDa

AP Molecular Mass: 12535 kDa

Tag: C-His & Fc

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of PMA-stimulated HSB2 human peripheral blood acute lymphoblastic leukemia cells. When cells are added to ICAM3-coated plates (12.5 µg/ml, 100 µl/well), approximately 45%-60% will adhere specifically.

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CD50;CDW50;ICAM-3;ICAM-R

Immunogen Information:

Sequence: Met 1-His 485

Background:

The protein ICAM-3, also known as CD50, is a member of the intercellular adhesion molecule (ICAM) family consisting three members. It is a DC-SIGN ligand that is constitutively expressed on resting leukocytes, and is thus an important molecule for the first immune response. ICAM-3 comprises of five immunoglobulin-like domains, and binds LFA through its two N-terminal domains. It functions not only as an adhesion molecule, but also as a potent signalling molecule. ICAM-3 binds to LFA on antigen-presenting cells (APC) stabilizing the T cell-APC interaction, facilitating signaling through the CD3/TCR complex. However, recent evidence using cultured and transformed T cells suggests ICAM-3 may also function in signaling. It has been reported that CD50 molecule can play a role in developing functionally mature T lymphocytes and its expression increases during the maturation process of T lymphocytes. In addition, the interactions of ICAM-3 and LFA facilitate HIV- induced virological synapse formation between T cells. ICAM-3 is associated with an increase of cellular radio-resistance and cancer cell proliferation. It could be considered as a candidate for anti-cancer drug development and as a cancer diagnostic marker.