



# Recombinant Protein Technical Manual

**Recombinant Human 2B4/CD244 Protein (Fc Tag)(Active)**  
RPES2743

## Product Data:

**Product SKU:** RPES2743

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_057466.1

## Protein Information:

**Molecular Mass:** 49 kDa

**AP Molecular Mass:** 70-80 kDa

**Tag:** C-Fc

**Bio-activity:** 1. Measured by its binding ability in a functional ELISA. Immobilized human CD48 at 10 µg/ml (100 µl/well) can bind recombinant human 2B4 / CD244 with a linear range of 0.004-0.4 µg/ml. 2. Measured by its ability to bind biotinylated mouse CD48 in a functional ELISA.

**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:** Functional ELISA

**Synonyms:** Natural killer cell receptor 2B4; NK cell activation-inducing ligand; NAIL; NKR2B4; h2B4; SLAM family member 4; SLAMF4; CD244; 2B4

## Immunogen Information:

**Sequence:** Met 1-Arg221

## Background:

The CD244 antigen, also known as 2B4, is a cell surface glycoprotein implicated in the regulation of natural killer and T lymphocyte function. 2B4 is a member of the signaling lymphocyte activation molecule (SLAM)-related receptor family and is important for stimulating NK cell cytotoxicity and cytokine production, which is expressed on all NK cells, a subpopulation of T cells, monocytes and basophils. The 2B4 antigen identified on NK cells and T cells is capable of transmitting stimulatory signals and non-MHC-restricted killing. Reported as an activating receptor, human 2B4 can effectively activate and enhance NK cell-mediated cytotoxicity, induce secretion of IFN- $\gamma$  and matrix metalloproteinases (MMPs), as well as NK cell invasiveness. As a cell surface glycoprotein of the Ig-superfamily structurally related to CD2-like molecules such as CD2, CD48, CD58, CD84, Ly-9, and SLAM, 2B4 (CD244) is expressed on all human NK cells, a subpopulation of T cells, basophils and monocytes. 2B4 activates NK cell mediated cytotoxicity, induces secretion of IFN-gamma and matrix metalloproteinases, and NK cell invasiveness.