

Recombinant Protein Technical Manual

Recombinant Human 2B4/CD244 Protein (His Tag)(Active) RPES2722

Product Data:

Product SKU: RPES2722 **Size:** 50μg

Species: Human Expression host: HEK293 Cells

Uniprot: NP_057466.1

Protein Information:

Molecular Mass: 23.8 kDa

AP Molecular Mass: 45-50 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human 2B4 at 2

 μ g/ml (100 μ l/well) can bind human CD48. The EC50 of human CD48 is 0.39 μ g/ml.

Purity: > 95 % 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-Arg 221

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-γ 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.