



Recombinant Protein Technical Manual
Recombinant Human 2B4/CD244 Protein (His Tag)
RPES5204

Product Data:

Product SKU: RPES5204

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q9BZW8-2

Protein Information:

Molecular Mass: 23.1 kDa

AP Molecular Mass: 35-60 kDa

Tag: C-6His

Bio-activity:

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 a 0.2 µm filtered solution of PBS, pH7.4.

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

Application:

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

Immunogen Information:

Sequence: Cys22-Arg221

Background:

Natural killer cell receptor 2B4 is a type I transmembrane glycoprotein in the SLAM subgroup of the CD2 protein family. 2B4 interacts with CD48, while other SLAM family proteins interact homophilically. Three additional splice variants of human 2B4 have deletions of the short region between the Ig-like domains, the second Ig-like domain, or a portion of the cytoplasmic tail. 2B4 is expressed on all NK cells, $\gamma\delta$ T cells, monocytes, some CD4+ and CD8+ T cells, and some dendritic cells. CD48 mediates 2B4+ cell interactions with nearly all hematopoietic cell types, including cells of the same type. 2B4/CD48 signaling cooperates with other receptor systems to either promote or inhibit NK and CD8+ T cell activation. The inhibitory activities are distinct from those of MHC I restricted inhibitory NK cell receptors. Ligation of 2B4 with antibodies or CD48 constructs can either directly trigger inhibitory signaling or disrupt an inhibitory interaction, leading to cellular activation. The inhibitory effect is associated with the long form of 2B4, while the activation is associated with the short form. 2B4 can also induce signaling through CD48.