



Recombinant Protein Technical Manual
Recombinant Mouse 2B4/CD244 Protein (His Tag)
RPES3069

Product Data:

Product SKU: RPES3069

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q07763

Protein Information:

Molecular Mass: 23.5 kDa

AP Molecular Mass: 35-60 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by 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 type I receptor protein 2B4; NKR2B4; SLAM family member 4; SLAMF4; Signaling lymphocytic activation molecule 4; CD244

Immunogen Information:

Sequence: Gln20-Asn221

Background:

Natural killer cell receptor 2B4 (2B4/CD244) is a 66 kDa type I transmembrane glycoprotein in the SLAM subgroup of the CD2 protein family. SLAM family proteins have an extracellular domain (ECD) with two or four Ig-like domains and at least two cytoplasmic immunoreceptor tyrosine-based switch motifs (ITSMs). 2B4 interacts with CD48, while other SLAM family proteins interact in a homophilic manner. The mouse 2B4 cDNA encodes a 397 amino acid (aa) precursor that includes a 19 aa signal sequence, a 207 aa ECD with one Ig-like V-type and one C2-type Ig-like domain, a 21 aa transmembrane segment, and a 150 aa cytoplasmic domain with four ITSMs. Within the ECD, mouse 2B4 shares 46% and 68% aa sequence identity with human and rat 2B4, respectively. 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 directly trigger inhibitory signaling or disrupt an inhibitory interaction, leading to cellular activation. 2B4 can also induce signaling through CD48.