

Product datasheet for TP727674

OriGene Technologies, Inc.

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Cd244a Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Mouse SLAMF4/Natural killer cell receptor 2B4/CD244 (C-6His)

Species: Mouse

Expression cDNA Clone

or AA Sequence:

Gln20-Asn221

Tag: C-His

Buffer: Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.

Note: Recombinant Mouse Natural killer cell receptor 2B4 is produced by our Mammalian

expression system and the target gene encoding Gln20-Asn221 is expressed with a 6His tag

at the C-terminus.

Stability: 12 months from date of despatch

Locus ID: 18106 UniProt ID: <u>Q07763</u>

Summary: 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.

