

## Recombinant Human 2B4 Catalog No: CS61

Description Recombinant Human Natural Killer Cell Receptor 2B4 is produced by our Mammalian expression

system and the target gene encoding Cys22-Arg221 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name Natural killer cell receptor 2B4; NK cell activation-inducing ligand; NAIL; NKR2B4; h2B4; SLAM

family member 4; SLAMF4; CD244; 2B4

Accession No. Q9BZW8-2

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence CQGSADHVVSISGVPLQLQPNSIQTKVDSIAWKKLLPSQNGFHHILKWENGSLPSNTSNDRFSFIVKNLS LLIKAAQQQDSGLYCLEVTSISGKVQTATFQVFVFDKVEKPRLQGQGKILDRGRCQVALSCLVSRDGNV SYAWYRGSKLIQTAGNLTYLDEEVDINGTH TYTCNVSNPVSWESHTLNLTQDCQNAHQEFRHHHHHH

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.

## Background

## SDS-Page



