

Recombinant Human 2B4/CD244 Protein (His Tag)

Catalog Number: PKSH032784

Note: Centrifuge before opening to ensure complete recovery of vial contents.

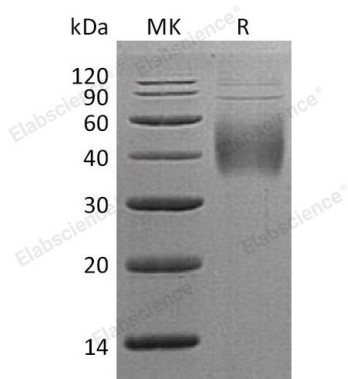
Description

Species	Human
Source	HEK293 Cells-derived Human 2B4/CD244 protein Cys22-Arg221, with an C-terminal His
Calculated MW	23.1 kDa
Observed MW	35-60 kDa
Accession	Q9BZW8-2
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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.