

### Synonym

CD244,2B4,SLAMF4,NKR2B4,NAIL,h2B4

### Source

Biotinylated Human 2B4, Fc,Avitag (2B4-H82F0) is expressed from human 293 cells (HEK293). It contains AA Cys 22 - Arg 221 (Accession # [Q9BZW8-2](#)).

Predicted N-terminus: Cys 22

### Molecular Characterization

2B4(Cys 22 - Arg 221) Q9BZW8-2	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 50.7 kDa. As a result of glycosylation, the protein migrates as 65-80 kDa under reducing (R) condition, and 130-160 kDa under non-reducing (NR) condition (SDS-PAGE).

### Biotinylation

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

### Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>95% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

### Storage

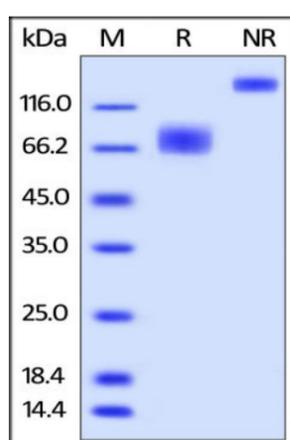
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

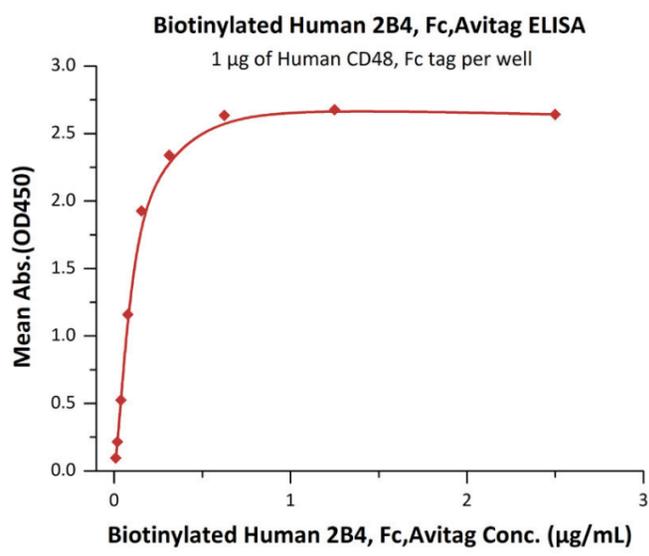
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### SDS-PAGE



Biotinylated Human 2B4, Fc,Avitag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### Bioactivity-ELISA



Immobilized Human CD48, Fc tag at 10 µg/mL (100 µL/well) can bind Biotinylated Human 2B4, Fc,Avitag (Cat. No. [2B4-H82F0](#)) with a linear range of 0.01-0.156 µg/mL (QC tested).

## Background

Natural killer cell receptor 2B4 is also known as NK cell type I receptor protein 2B4 (NKR2B4 or h2B4), SLAM family member 4 (SLAMF4), Signaling lymphocytic activation molecule 4, CD antigen CD244. NKR2B4 / CD244 contains two Ig-like (immunoglobulin-like) domains. CD244 is expressed in spleen, PBL, followed by lung, liver, testis and small intestine. CD244 interacts with CD48. Following phosphorylation, CD244 is able to recruit PTPN11/SHP-2 and SH2D1A/SAP. SLAMF4 modulate other receptor-ligand interactions to enhance leukocyte activation. CD244/2B4 is the only heterophilic receptor of SLAM family.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.