Human CD16b / FCGR3B Protein (His Tag)

Catalog Number: **11046-H08C**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CD16b, FCG3, FCGR3, IGFR3, FCGR3B

Protein Construction:

A DNA sequence encoding the human CD16b (NP_000561.3) (Met 1-Ser 200) with a C-terminal polyhistidine tag was expressed.

Source: Human

Expression Host: CHO Cells

QC Testing

Purity: > 99 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Gly 17

Molecular Mass:

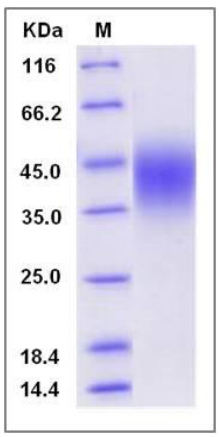
The recombinant human CD16b comprises 195 amino acids with a predicted molecular mass of 22.2 kDa. As a result of glycosylation, it migrates as an approximately 38-43 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

SDS-PAGE:



Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

CD16, the low affinity Fc gamma receptor III for IgG (FcgammaRIII), exists as a polypeptide-anchored form (CD16a) in human natural killer cells and macrophages and as a GPI-anchored form (CD16b) exclusively expressed on human neutrophils. CD16b is unique in that it is the only Fc receptor linked to the plasma membrane. The GPI-anchored proteins often preferentially localize to DRMs (detergent-resistant membranes) that are rich in sphingolipids and cholesterol and play an important role in signal transduction. CD16b constitutively partitions with both low- and high-density DRMs. Upon CD16b engagement, a significant increase in the amount of the receptor is observed in high-density DRMs. It is indicated that CD16b associates with complement receptor 3 (CR3, Mac-1, CD11b/CD18) which can indirectly link CD16b to the actin cytoskeleton.

References

1. Nagarajan S. et al., 1995, J Biol Chem. 270 (43): 25762-70.
2. Middelhoven P J. et al., 1999, Biochem Biophys Res Commun. 255 (3): 568-74.
3. Williams T E. et al., 2000, Biophys J. 79 (4): 1867-75.
4. Fernandes M J. et al., 2006, Biochem J. 393 (1): 351-9.