Cynomolgus / Rhesus CD19 Protein (Fc Tag, ECD)

Catalog Number: **90051-C02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

B4; CVID3; AW495831

Protein Construction:

A DNA sequence encoding the cynomolgus CD19 (XP_005591597.1) (Met1-Lys292) was expressed with the Fc region of human IgG1 at the C-terminus. Cynomolgus and Rhesus CD19 sequences are identical.

Source: Cynomolgus

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per μg 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: Gln 21

Molecular Mass:

The recombinant cynomolgus CD19 consists of 513 amino acids and predicts a molecular mass of 57 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

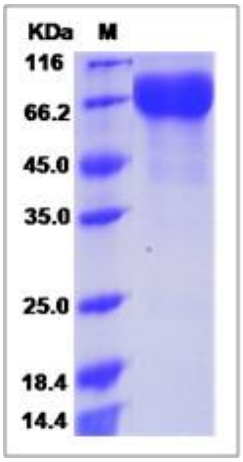
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 19 (CD19) is a member of CD system. CD19 is a cell surface molecule that assembles with the antigen receptor of B-cells. This results in a descent in threshold for antigen receptor-dependent stimulation. A simplified view holds that the ability of B-cells to respond to the various antigens in a specific and sensitive manner is achieved in the presence of low-affinity antigen receptors. CD19 primarily acts as a B-cell coreceptor in conjunction with CD21 and CD81. The formation of the receptor complex is induced by antigen and CD19, induced by exogenous antigen, has been found cytoplasmic tail phosphorylated and bind to sIg.

References

1.Zola H, *et al.* (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.
2.Ho IC, *et al.* (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.
3.Matesanz-Isabel J, *et al.* (2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12.