Rat CD63 / Tspan-30 / Tetraspanin-30 Protein (His Tag)

Catalog Number: **80304-R07H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

LAMP-3; ME491; MLA1; OMA81H; TSPAN30; C75951; ME491; Tspan30

Protein Construction:

A DNA sequence encoding the rat CD63 (P28648) (Ala103-Val203) was expressed with a polyhistidine tag at the N-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: (25.6+25.0+35.9) % 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: His

Molecular Mass:

The recombinant rat CD63 comprises 121 amino acids and has a predicted molecular mass of 13.8 kDa. The apparent molecular mass of the protein is approximately 24, 19, 15 kDa in SDS-PAGE under reducing conditions due to glycosylation.

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:

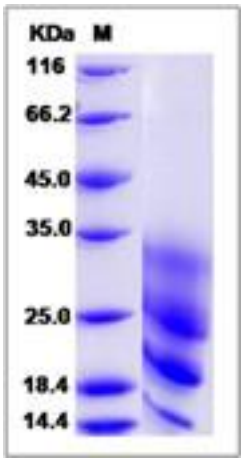
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 63 (CD63) is a member of the CD family and the transmembrane 4 superfamily,also known as the tetraspanin family. CD63 is a cellular surface glycoprotein characterized by the presence of four bydrophobic domains. CD63 had functions in mediating signal transduction processes and then regulate variety of cellular processes such as cell proliferation, activation and motility. It has reported that CD63 protein associated with tumor progression and served as a blood platlet activation marker and the deficiency of this protein may be associated with Hermansky-Pudlak syndrome.

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.