Mouse TNFR1 / CD120a / TNFRSF1A Protein (Fc Tag)

Catalog Number: **50496-M02H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

CD120a, FPF, TNF-R, TNF-R-I, TNF-R1, TNF-R55, TNF-alphaR1, TNFAR, TNFR60, TNFRI, TNFRp55, TNFalpha-R1, Tnfr-2, Tnfr1, p55, p55-R

Protein Construction:

A DNA sequence encoding the mouse TNFRSF1A (NP_ 035739.2) extracellular domain (Met 1-Ala 212) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Immobilized mouse TNFa (80-235) (Cat:50349-MNAE?) at 10 μg/ml (100 μl/well) can bind mouse TNFRSF1A-Fc, The EC_{50} of mouse TNFRSF1A-Fc is 0.03-0.07 μg/ml.

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: Leu 30

Molecular Mass:

The secreted recombinant mouse TNFRSF1A/Fc is a disulfide-linked homodimer. The reduced monomer consists of 424 amino acids and has a predicted molecular mass of 47.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rm TNFRSF1A/Fc monomer is approximately 55 kDa 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:

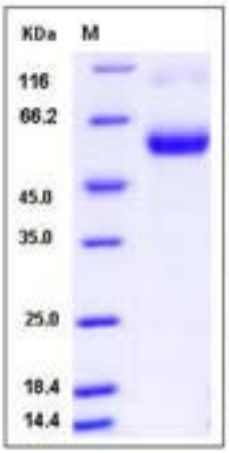
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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. CD120a (cluste of differentiation 120a), also known as TNFR1 / TNFRSF1A, is a member of CD family, tumor necrosis factor receptor superfamily. CD120a is one of the most primary receptors for the tumor necrosis factor-alpha. It has been shown to be localized to both plasma membrane lipid rafts and the trans golgi complex with the help of the death domain (DD). CD120a can activate the transcription factor NF-κB, mediate apoptosis, and regulate inflammation processes.

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.