Cynomolgus LTBR / TNFRSF3 Protein (Fc Tag)

Catalog Number: **90101-C02H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

CD18; D12S370; LT-BETA-R; TNF-R-III; TNFCR; TNFR-RP; TNFR2-RP; TNFR3; TNFRSF3; AI256028; CD18; Ltar; LTbetaR; TNF-R-III; Tnfbr; TNFCR; TNFR-RP; TNFR2-RP; TNFRrp; Tnfrsf3

Protein Construction:

A DNA sequence encoding the cynomolgus LTBR (F6V995) (Met1-Met225) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Cynomolgus

Expression Host: Human Cells

QC Testing

Purity: > 85 % 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: Ser 28

Molecular Mass:

The recombinant cynomolgus LTBR is a disulfide-linked homodimer. The reduced monomer comprises 439 amino acids and has a calculated molecular mass of 48.8 KDa. The apparent molecular mass of the protein is approximately 64-70 KDa respectively in SDS-PAGE.

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:

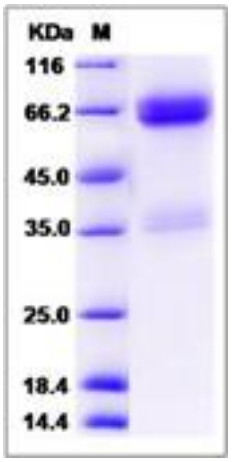
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

LTBR (lymphotoxin beta receptor (TNFR superfamily, member 3)) is a member of the tumor necrosis factor (TNF) family of receptors. Tumor necrosis factor receptor is a trimeric cytokine receptor that binds tumor necrosis factors. The receptor cooperates with an adaptor protein (such as TRADD, TRAF, RIP), which is important in determining the outcome of the response. LTBR is expressed on the surface of most cell types, including cells of epithelial and myeloid lineages, but not on T and B lymphocytes. LTBR specifically binds the lymphotoxin membrane form (a complex of lymphotoxin-alpha and lymphtoxin-beta). LTBR and its ligand play a role in the development and organization of lymphoid tissue and tranformed cells. Activation of this protein can trigger apoptosis. Not only does the LTBR help trigger apoptosis, it can lead to the release of the cytokine interleukin 8. Overexpression of LTBR in HEK293 cells increases IL-8 promoter activity and leads to IL-8 release. It is also essential for development and organization of the secondary lymphoid organs and chemokine release.

References

1.Summers deLuca L, *et al.* (2011) A LTβR signaling in dendritic cells induces a type I IFN response that is required for optimal clonal expansion of CD8+ T cells. Proc Natl Acad Sci. 108(5):2046-51.
2.Bista P, *et al.* (2010) TRAF3 controls activation of the canonical and alternative NFkappaB by the lymphotoxin beta receptor. J Biol Chem. 285(17):12971-8.
3.Xu Y, *et al.* (2011) Adiponectin inhibits lymphotoxin-β receptor-mediated NF-κB signaling in human umbilical vein endothelial cells. Biochem Biophys Res Commun. 404(4):1060-4.