

Human / Cynomolgus TNFSF12 Protein (Fc Tag)

Catalog Number: 90094-C04H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

TNFSF12

Protein Construction:

A DNA sequence encoding the human / cynomolgus TNFSF12 (F7HGN4) (Ser94-His249) was expressed with the Fc region of mouse IgG1 at the N-terminus. Human and Cynomolgus TNFSF12 sequences are identical.

Source: Human, Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

1. Measured in a cell proliferation assay using HUVEC human umbilical vein endothelial cells. The ED50 for this effect is typically 4-16 ng/mL.
2. Immobilized Cynomolgus mFc-TNFSF12 at 10 µg/ml (100 µl/well) can bind human Fc-TNFRSF12A (Cat:10431-H01H). The EC50 of human Fc-TNFRSF12A (Cat:10431-H01H) is 0.07-0.15 µg/ml.

Endotoxin:

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

Predicted N terminal: Asp

Molecular Mass:

The recombinant human / cynomolgus TNFSF12 is a disulfide-linked homodimer. The reduced monomer comprises 392 amino acids and has a calculated molecular mass of 43.8 KDa. The apparent molecular mass of it is approximately 34 and 47 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

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

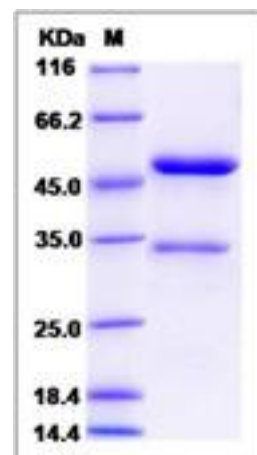
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

TNFSF12 is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. It is a ligand for the FN14/TWEAKR receptor. TNFSF12 has overlapping signaling functions with TNF, but displays a much wider tissue distribution. It can induce apoptosis via multiple pathways of cell death in a cell type-specific manner. It is also found that TNFSF12 promotes proliferation and migration of endothelial cells, and thus acts as a regulator of angiogenesis. TNFSF12 also is a weak inducer of apoptosis in some cell types and mediates NF-kappa-B activation.

References

1. Wiley SR, et al. (2004) TWEAK, a member of the TNF superfamily, is a multifunctional cytokine that binds the TweakR/Fn14 receptor. Cytokine Growth Factor Rev. 14(3-4):241-9.
2. Campbell S, et al. (2006) The role of TWEAK/Fn14 in the pathogenesis of inflammation and systemic autoimmunity. Front Biosci. 9:2273-84.
3. Lynch CN, et al. (1999) TWEAK induces angiogenesis and proliferation of endothelial cells. J Biol Chem. 274(13):8455-9.