Rat TNFSF12 Protein (Fc Tag)

Catalog Number: 80154-R01H

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

TNFSF12

Protein Construction:

A DNA sequence encoding the rat TNFSF12 (NP_001001513.2)(Arg105-His249) was expressed with Fc region of human IgG1 at the N-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio Activity:

Immobilized Fc-rat TNFSF12 at 10 μg/ml (100 μl/well) can bind biotinylated human Fc-TNFRSF12A (Cat:10431-H01H), The EC_{50} of biotinylated human Fc-TNFRSF12A (Cat:10431-H01H) is 0.12-0.28 μg/ml.

Endotoxin:

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

Predicted N terminal: Glu

Molecular Mass:

The recombinant rat TNFSF12 comprises 405 amino acids and predicts a molecular mass of 44.4 kDa. The apparent molecular mass of the recombinant protein is approximately 49 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

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

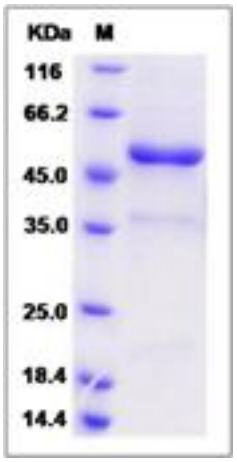
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.