# Rat TNFSF15 / TL1A Protein (Fc Tag)

Catalog Number: 80150-R01H



## **General Information**

Gene Name Synonym:

TNFSF15

#### **Protein Construction:**

A DNA sequence encoding the rat TNFSF15 (Q8K3Y7) (Asp94-Ile252) was expressed, fused with the Fc region of human IgG1 at the N-terminus.

Source:

Expression Host: HEK293 Cells

## **QC** Testing

**Purity:** > 90 % as determined by SDS-PAGE

Rat

## Endotoxin:

< 1.0 EU per  $\mu$ g of the protein as determined by the LAL method

## Stability:

Samples are stable for up to twelve months from date of receipt  $\,$  at -70  $^\circ \! \mathbb{C}$ 

Predicted N terminal: Asp 94

## **Molecular Mass:**

The recombinant rat TNFSF15/Fc is a disulfide-linked homodimer. The reduced monomer comprises 419 amino acids and has a predicted molecular mass of 46.5 kDa. The apparent molecular mass of the protein is approximately 55 kDa in SDS-PAGE under reducing conditions.

#### 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:

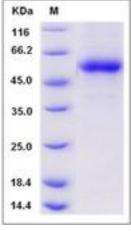
Store it under sterile conditions at -20  $^\circ\!C$  to -80  $^\circ\!C$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

## Avoid repeated freeze-thaw cycles.

## **Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



# **Protein Description**

TL1A, also known as TNFSF15, is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. It is specifically expressed in endothelial cells. TL1A also can be detected in monocytes, placenta, lung, liver, kidney, skeletal muscle, pancreas, spleen, prostate, small intestine and colon. TL1A is a ligand for receptor TNFRSF25 and decoy receptor TNFRSF21/DR6. It mediates activation of NF-kappa-B. It also inhibits vascular endothelial growth and angiogenesis (in vitro). TL1A promotes activation of caspases and apoptosis. It is also found to inhibit endothelial cell proliferation, and thus may function as an angiogenesis inhibitor.

#### References

1.Jin T, *et al.* (2007) X-ray crystal structure of TNF ligand family member TL1A at 2.1A. Biochem Biophys Res Commun. 364(1):1-6. 2.Cassatella MA, *et al.* (2007) Soluble TNF-like cytokine (TL1A) production by immune complexes stimulated monocytes in rheumatoid arthritis. J Immunol. 178(11):7325-33 3.Prehn JL, *et al.* (2007) The T cell costimulator TL1A is induced by FcgammaR signaling in human monocytes and dendritic cells. J Immunol. 178(7):4033-8.