Recombinant Mouse TNFSF15/TL1A Protein

Catalog No.: RP01936

www.abclonal.com

Sequence Information

Species	Gene ID
Mouse	326623
Swiss Prot	**Tags**
Q5UBV8	NO-Tag

Synonyms

Tnfsf15, Tl1, Vegi,Tumor necrosis factor ligand superfamily member 15, TNF ligand-related molecule 1, Vascular endothelial cell growth inhibitor

Product Information

Source	Purification
E. coli	≥ 95 % as determined by SDS-PAGE.
Calculated MW	**Observed MW**
19.90 kDa	20-25 kDa

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from 0.22 μm filtered solution in 20mM PB,300mM NaCl (pH 7.0). Normally 8% trehalose is added as protectant before lyophilization.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

TL1A is a type II transmembrane protein belonging to the TNF superfamily and has been designated TNF superfamily member 15 (TNFSF15). Mouse TL1A is a 252 amino acid residues (aa) protein consisting of a 35 aa N-terminal cytoplasmic domain, a 24 aa transmembrane region and 193 aa C-terminal extracellular domain. TL1A is expressed predominantly in endothelial cells and its expression is stimulated by TNF-a and IL-1a. Non-endothelial cells of the gut mucosa, including lamina propria lymphocytes and tissue macrophages, also express TL1A and at higher levels in chronic inflammatory bowel disorders . TL1A binds with high affinity to death receptor 3 (DR3), which is now designated TNF receptor superfamily member 25 (TNFRSF25). DR3 was formerly designated TNFRSF12 when it was thought to be the receptor for TWEAK/TNFSF12. Depending on the cell type, DR3-TL1A interactions have different effects. Ligation of DR3 on activated T cells by TL1A provides a costimulatory signal to increase IL-2 responsiveness and the secretion of proinflamatory cytokines . The promotion of survival of activated T cells by TL1a results from the activation of the transcription factor NF-kappa-B. In a tumor erythroleukemic cell line, TF-1, DR3-TL1A signaling increases production of the NF-kB-dependent antiapoptotic protein c-IAP2, promoting survival in these cells . In HUVEC cells, which express both DR3 and TL1A, ligation of DR3 by TL1A regulates cell apoptosis . These effects of TL1A are blocked by the secreted, soluble decoy receptor 3 (DcR3), also known as TR6 and TNFRSF6B, which compete with DR3 for binding to TL1A . Consistent with the observed in vitro activities, TL1A promotes ex vivo splenocyte expansion and enhances in vivo graft-versus-host-response. The level of TL1A in cells of gut mucosa, in patients with bowel inflammatory disorders, correlates with the severity of inflammation, and TL1A may play a role in a Th1-mediate pathological conditions such as Crohn's disease .

Basic Information

Description

Recombinant Recombinant Mouse TNFSF15/TL1A Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Ile76-Leu252) of Mouse TNFSF15/TL1A (Accession #NP_796345.3) fused with no tag .

Activity

Measured by its ability to induce apoptosis of TF-1 human erythroleukemic cells. The ED_{50} for this effect is 15.61-62.44 ng/mL, corresponding to a specific activity of 1.60×10^4~6.41×10^4 units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20℃

Operational Notes

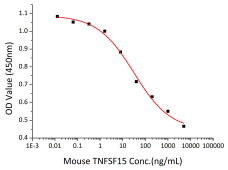
Contact

400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

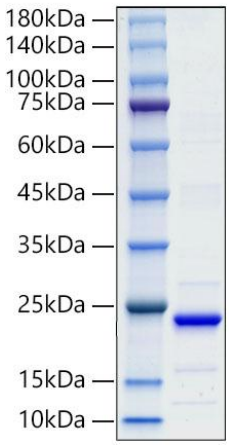
For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

For your safety and health, please wear a lab coat and disposable gloves for handling.

Validation Data



Recombinant Mouse TNFSF15/TL1A Protein induce apoptosis of TF-1 human erythroleukemic cells. The ED_{50} for this effect is 15.61-62.44 ng/mL, corresponding to a specific activity of 1.60×10^4~6.41×10^4 units/mg.



Recombinant Mouse TNFSF15/TL1A Protein was determined by SDS-PAGE under reducing (R) .