Recombinant Mouse TNFSF15/TL1A Protein



RPCB0013

Product Information

Product SKU: RPCB0013 **Gene ID**: 326623 **Size**: 10μg

Tag: NO-Tag Reactivity: Mouse

Additional Information

Expression Host: - **Swissprot**: Q5UBV8

Purity: > 95% by SDS-PAGE.

Protein Information

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 TNFa 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 NFkB-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.

Protein Description:

High quality, high purity and low endotoxin recombinant Recombinant Mouse TNFSF15/TL1A Protein , tested reactivity inE. coliand has been validated in SDS-PAGE.100% guaranteed.

Endotoxin:

<1EU/ug 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.

Storage:

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.