



LD Biopharma, Inc.
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<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human TNFSF18 Protein
Catalog Number: hRP-1046
Manufacturer: LD Biopharma, Inc.

Introduction

The protein encoded by human tumor necrosis factor ligand superfamily member 18 (TNFSF18) gene is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This cytokine is a ligand for receptor TNFRSF18/AITR/GITR. It has been shown to modulate T lymphocyte survival in peripheral tissues. This cytokine is also found to be expressed in endothelial cells, and is thought to be important for interaction between T lymphocytes and endothelial cells.

Full-length extracellular domain of human TNFSF18 cDNA (72 - 199 aa, derived from BC074941) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal and expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: TNFSF18 (AITRL; GITRL;hGITRL; TL6)
Accession Number: NP_005109.2
Species: Human
Size: 50 µg / Vial
Composition: 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References



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Placke,T., et al., *GITR ligand provided by thrombopoietic cells inhibits NK cell antitumor activity*. J. Immunol. 189 (1), 154-160 (2012)

Byrne,A.M., et al., *Induction of GITRL expression in human keratinocytes by Th2 cytokines and TNF-alpha: implications for atopic dermatitis*. Clin. Exp. Allergy 42 (4), 550-559 (2012)

Chen,M., et al., *IFN-beta induces the proliferation of CD4+CD25+Foxp3+ regulatory T cells through upregulation of GITRL on dendritic cells in the treatment of multiple sclerosis*. J. Neuroimmunol. 242 (1-2), 39-46 (2012)

Applications

1. May be used for in vitro TNFSF18 mediated regulatory T cells proliferation or activation regulations study with this protein as soluble factor.
2. May be used for TNFSF18 protein-protein interaction assay development.
3. May be used s potential therapeutic target for regulating T cell function such as psoriatic skin lesions treatment.
4. As antigen for specific antibody production.

Quality Control

1. Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGEFQLETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSD
WKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLTNKSKIQNVGTTYELHVGDTI
DLIFNSEHQVLKNNTYWGILLANPQFIS