Human TNFSF14 / LIGHT / CD258 Protein (His Tag)

Catalog Number: 10386-H07H

General Information

Gene Name Synonym:
CD258; HVEML; LIGHT; LTg; TR2

Protein Construction:
A DNA sequence encoding the human TNFSF14 (NP_003798.2) extracellular domain (Asp 74-Val 240) was fused with a polyhistidine-tag at the N-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

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

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:
The recombinant human TNFSF14 consists of 183 amino acids and and has a predicted molecular mass of 20.4 kDa.

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°C to -80°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

LIGHT, also known as TNFSF14 or CD258, is a newly identified member of the TNF superfamily (TNFSF14) that is expressed by activated T lymphocytes, monocytes, granulocytes, spleen cells, and immature dendritic cells. TNFSF14 / LIGHT / CD258 is a type II transmembrane protein that is known to bind 2 membrane-bound TNFSF signaling receptors: HVEM, which is predominantly expressed by T cells, and lymphotoxin β receptor (LTβR), which is expressed by stromal cells and nonlymphoid hematopoietic cells. TNFSF14 / LIGHT / CD258 also binds to a soluble nonsignaling receptor, decoy receptor 3 (DcR3), which can modulate the function of LIGHT in vivo. TNFSF14 / LIGHT / CD258 can also costimulate T cell responses via HVEM, which is constitutively expressed in most lymphocyte subpopulations, including CD4+ and CD8+ T cells. In addition, TNFSF14 / LIGHT / CD258 has been shown to suppress tumor formation in vivo and to induce tumor cell apoptosis via the up-regulation of intercellular adhesion molecule 1 and an increased lymphocyte adhesion to cancer cells. Thus, TNFSF14 / LIGHT / CD258 is being actively investigated as a possible basis for cancer treatment.

References