



Recombinant Protein Technical Manual

Recombinant Human TNFSF14/LIGHT Protein (His Tag)

RPES3688

Product Data:

Product SKU: RPES3688

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_003798.2

Protein Information:

Molecular Mass: 20.4 kDa

AP Molecular Mass:

Tag: N-His

Bio-activity:

Purity: > 85 % as determined by reducing SDS-PAGE.

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CD258;HVEM-L;LIGHT;LTg;TR2;Tumor necrosis factor ligand superfamily member 14; Herpes virus entry mediator ligand; TNFSF14; HVEM-L; LIGHT

Immunogen Information:

Sequence: Asp 74-Val 240

Background:

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 (LT β R), 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.