

LIGHT Active Protein | TNFSF14 active protein

LIGHT Protein, Human, Recombinant (rFc Tag)

CATALOG #
AAA257879

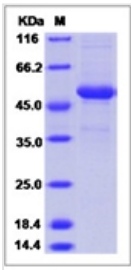
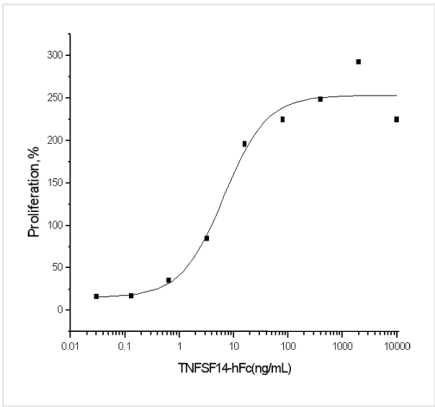
HOST
HEK293 Cells

PRODUCT SYNONYMS

LIGHT; LIGHT Protein; Human; Recombinant (rFc Tag); Human TNFSF14/LIGHT/CD258 Protein (Fc Tag); CD258 Protein; HVEM Protein; LTg Protein; TR2 Protein; tumor necrosis factor (ligand) superfamily; member 14; TNFSF14 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 50mM Tris, 100mM NaCl, pH8.5. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Asp74-Val240
Species	Human
Activity	Measured in a cell proliferation assay using human umbilical vein endothelial cells (HUVEC). The ED50 for this effect is typically 5-25ng/mL.
Endotoxin	<1.0EU per ug protein as determined by the LAL method.
Predicted N Terminal	Ser
Tag	N-rabbit IgG-Fc
Protein Construction	A DNA sequence encoding the human TNFSF14 (AAK26160.1)(Asp74-Val240) was expressed with the Fc region of rabbit IgG at the N-terminus..
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured in a cell proliferation assay using human umbilical vein endothelial cells (HUVEC).
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ADDITIONAL INFORMATION

Related Product Information for TNFSF14 active protein	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 beta receptor (LTbetaR), which is expressed by stromal cells and nonlymphoid hematopoietic cells. TNFSF14/LIGHT/CD258 also binds to a soluble non-signaling 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.
Product Categories/Family for TNFSF14 active protein	Cancer Drug Targets
References	Ogawa T, et al. (2010) CXCR3 binding chemokine and TNFSF14 over expression in bladder urothelium of patients with ulcerative interstitial cystitis. J Urol. 183(3): 1206-12.Kanodia S, et al. (2010) Expression of LIGHT/TNFSF14 combined with vaccination against human papillomavirus Type 16 E7 induces significant tumor regression. Cancer Res. 70(10): 3955-64.Hosokawa Y, et al. (2010) TNFSF14 coordinately enhances CXCL10 and CXCL11 productions from IFN-gamma-stimulated human gingival fibroblasts. Mol Immunol. 47(4): 666-70.

NCBI AND UNIPROT INFORMATION

Molecular Weight	The recombinant human TNFSF14 consists of 418 amino acids and predicts a molecular mass of 45.7kDa.
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.