
Recombinant human LIGHT protein, C-His (HEK293)

Catalog Number: bs-47145P

Concentration: >0.5 mg/ml

AA Seq: 74-240/240

Predicted MW: 18

Detected MW: Due to glycosylation, the protein migrates to 25-30 kDa based on Tris-Bis PAGE result.

Tags: C-His

Activity: Not tested

Endotoxin: <1.0 EU/μg as determined by LAL

Purity: >95% as determined by Tris-Bis PAGE

Purification: AC

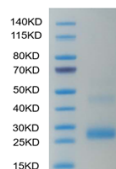
Form: Lyophilized

Storage: Lyophilized from 0.22um filtered solution in PBS (pH7.4) with 5mM DTT. Normally 5% trehalose is added as protectant before Lyophilization.

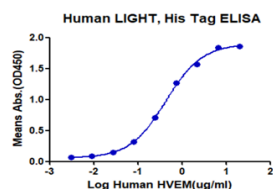
Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

Background: LIGHT protein is a type II transmembrane protein and a tumor necrosis factor (TNF) ligand superfamily member (TNFSF14). LIGHT is expressed on activated T cells and immature dendritic cells and its receptors have been identified as lymphotoxin-Beta receptor (LTBetaR) and the herpesvirus entry mediator (HVEM), both of which lack the cytoplasmic sequence termed as "death domain." LIGHT is first identified as HVEM ligand (HVEM-L) and a deterrent to herpesvirus infection according to its ability to compete with HSV glycoprotein D for HVEM binding. As a T cell-derived costimulatory ligand, TNFSF14 plays a crucial role in T cell activation and proliferation by LIGHT-LTBetaR interaction, and it is necessary and sufficient for LIGHT-mediated apoptosis of tumor cells. Additionally, recent studies also establish a direct role for LIGHT in NK activation/expansion via LIGHT-HVEM interaction, and thus breaking T-cell tolerance at the tumor site. Accordingly, LIGHT is suggested to be involved in CTL-mediated tumor rejection, allograft rejection and graft versus host disease. Although known as lymphotoxin-Gamma, LIGHT plays a minimal role in lymphoid tissue development in contrast with LT-Alpha and Beta. This protein was also demonstrated to inhibit TNF-Alpha-mediated but not Fas- or TRAIL-mediated apoptosis of human primary hepatocytes.

VALIDATION IMAGES



Human LIGHT on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.



Immobilized Human LIGHT,His Tag at 1 μ g/ml (100 μ l/Well). Dose response curve for Human HVEM,hFc Tag with the EC₅₀ of 0.4 μ g/ml determined by ELISA.