
Recombinant human LIGHT (Trimer) protein, N-His-Flag (HEK293)

Catalog Number: bs-47146P

Concentration: >0.5 mg/ml

AA Seq: 74-240/240

Predicted MW: 52.4

Detected MW: Due to glycosylation, the protein migrates to 52-140 kDa based on Tris-Bis PAGE result.

Tags: N-His-Flag

Activity: Not tested

Endotoxin: <1.0 EU/μg as determined by LAL

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

Purification: AC

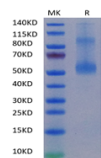
Form: Lyophilized

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

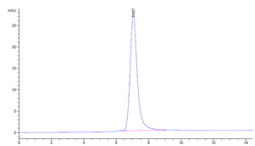
Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

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 (LTβR) 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-LTβR 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.

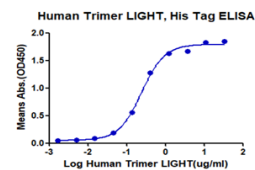
VALIDATION IMAGES



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



The purity of LIGHT(Cat.LGT-HM132) is greater than 95% as determined by SEC-HPLC.



Immobilized Human HVEM(Cat.HVE-HM211) at 0.5ug/ml(100ul/Well).Dose response curve for Human Trimer LIGHT, with the EC50 of 0.24ug/ml determined by ELISA.