

**Synonym**

CD258 antigen,CD258,HVEM-L,LIGHT,LTg,TNFSF14,TR2,HVEML

**Source**

Human LIGHT, His Tag (LIT-H5247) is expressed from human 293 cells (HEK293). It contains AA Asp 74 - Val 240 (Accession # [O43557-1](#)).

**Molecular Characterization**

Poly-his LIGHT(Asp 74 - Val 240)  
O43557-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 20.9 kDa. The protein migrates as 24-26 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22  $\mu\text{m}$  filtered solution in PBS with Arginine, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

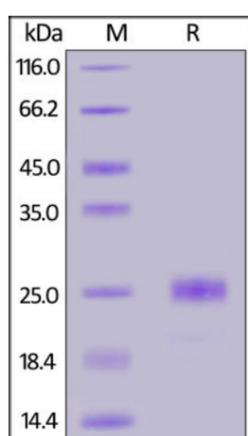
**Storage**

For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}\text{C}$  or lower.

*Please avoid repeated freeze-thaw cycles.*

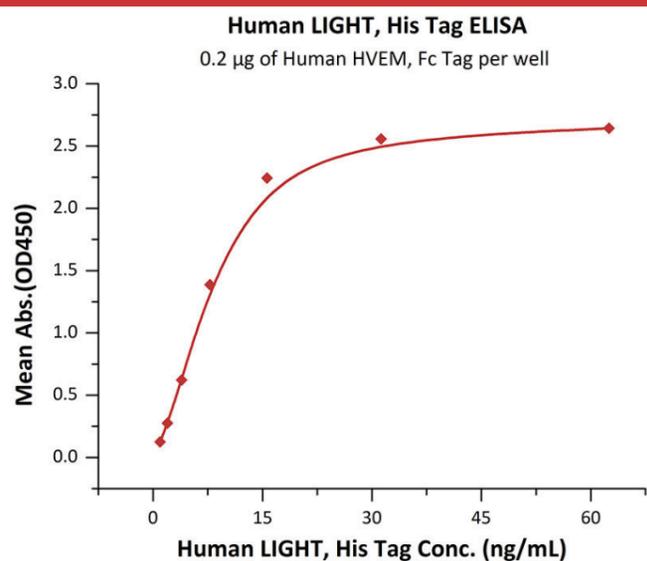
This product is stable after storage at:

- $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  for 12 months in lyophilized state;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

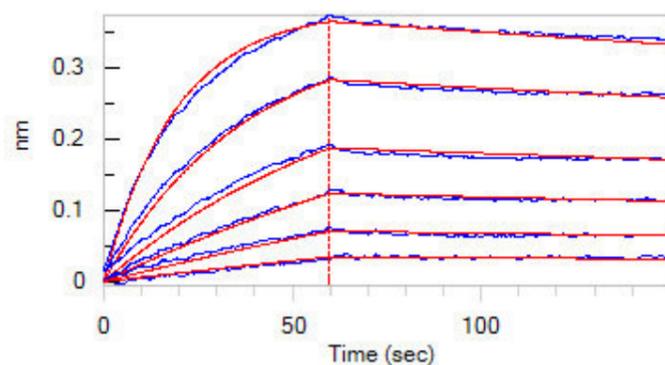
Human LIGHT, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized Human HVEM, Fc Tag (Cat. No. [HVM-H5258](#)) at 2 µg/mL (100 µL/well) can bind Human LIGHT, His Tag (Cat. No. [LIT-H5247](#)) with a linear range of 1-16 ng/mL (QC tested).

### Bioactivity-BLI



Loaded Human DcR3, Fc Tag (Cat. No. [TNB-H5255](#)) on AHC Biosensor, can bind Human LIGHT, His Tag (Cat. No. [LIT-H5247](#)) with an affinity constant of 4.94 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

### Background

Tumor necrosis factor ligand superfamily member 14(LIGHT) is a tumor necrosis factor (TNF) superfamily ligand that regulates T cell immune responses by signaling through the herpes virus entry mediator (HVEM) and the lymphotoxin beta receptor (LTbetaR). LIGHT has emerged as a potent initiator of T cell co-stimulation signals effecting CTL-mediated tumor rejection, allograft rejection and graft versus host disease. Constitutive expression of LIGHT leads to tissue destruction and autoimmune-like disease syndromes.

### References

- (1) [Mauri DN., et al. 1998, Immunity., 8\(1\), 21-30.](#)
- (2) [Granger SW., et al. 2003, Cytokine Growth Factor Rev., 14\(3-4\), 289-96.](#)
- (3) [Pasero C., et al. 2009, Curr Mol Med., 9\(7\), 911-27.](#)

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.