

Synonym

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

Source

Human LIGHT Protein, Mouse IgG2a Fc Tag(LIT-H5256) is expressed from human 293 cells (HEK293). It contains AA Asp 74 - Val 240 (Accession # O43557-1).

Predicted N-terminus: Glu

Molecular Characterization

mFc(Glu 98 - Lys 330) LIGHT(Asp 74 - Val 240) P01863 O43557-1

This protein carries a mouse IgG2a Fc tag at the N-terminus

The protein has a calculated MW of 45.1 kDa. The protein migrates as 50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than $0.1 \ EU$ per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

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

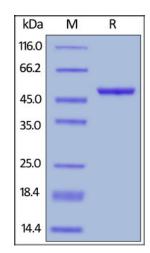
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

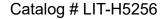
SDS-PAGE



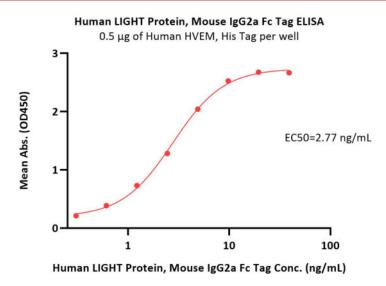
Human LIGHT Protein, Mouse IgG2a Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

Human LIGHT / TNFSF14 Protein, Mouse IgG2a Fc Tag, low endotoxin

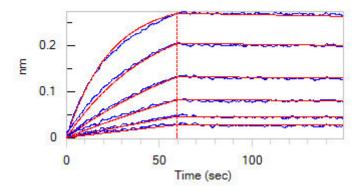






Immobilized Human HVEM, His Tag (Cat. No. HVM-H52E9) at 5 μ g/mL (100 μ L/well) can bind Human LIGHT Protein, Mouse IgG2a Fc Tag (Cat. No. LIT-H5256) with a linear range of 0.3-5 ng/mL (QC tested).

Bioactivity-BLI



Loaded Human DcR3, Fc Tag (Cat. No. TNB-H5255) on AHC Biosensor, can bind Human LIGHT Protein, Mouse IgG2a Fc Tag (Cat. No. LIT-H5256) with an affinity constant of 1.64 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 costimulation 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.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.