

## HUMAN LIGHT PROTEIN, HFC TAG

**Cat.#:** 11175

**Product Name:** Human LIGHT Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** TNFSF14;CD258;HVEM;LIGHT;LTg

**Target:** LIGHT

**UNIPROT ID:** O43557

**Description:** Recombinant Human LIGHT protein with N-terminal human Fc

**Background:** The protein encoded by this gene is a member of the tumor necrosis factor (TNF) ligand family. This protein is a ligand for TNFRSF14, which is a member of the tumor necrosis factor receptor superfamily, and which is also known as a herpesvirus entry mediator (HVEM). This protein may function as a costimulatory factor for the activation of lymphoid cells and as a deterrent to infection by herpesvirus. This protein has been shown to stimulate the proliferation of T cells, and trigger apoptosis of various tumor cells. This protein is also reported to prevent tumor necrosis factor alpha mediated apoptosis in primary hepatocyte. Two alternatively spliced transcript variant encoding distinct isoforms have been reported.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 43.4 kDa after removal of the signal peptide.

**Molecular Characterization:** hFc(Glu99-Ala330) LIGHT(Leu83-Val240)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

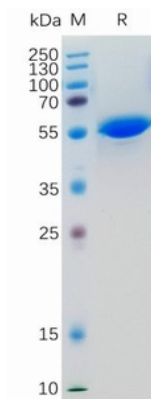


Figure 1. Human LIGHT Protein, hFc Tag on SDS-PAGE under reducing condition.

## Human LIGHT, hFc Tagged protein ELISA

0.2  $\mu$ g of Human HVEM, His Tagged protein per well

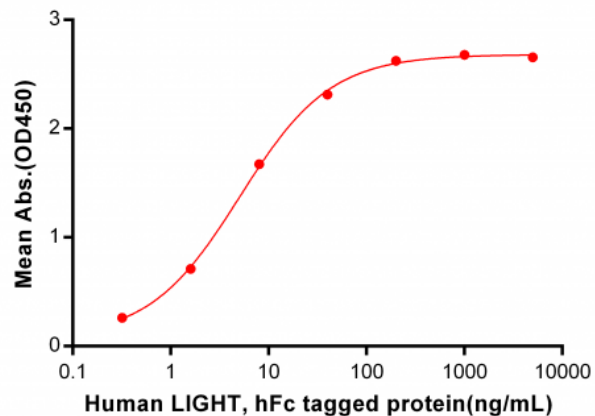


Figure 2. ELISA plate pre-coated by 2  $\mu$ g/ml (100  $\mu$ l/well) Human HVEM, His tagged protein 11253 can bind Human LIGHT, hFc tagged protein (11175) in a linear range of 0.32-40 ng/ml.

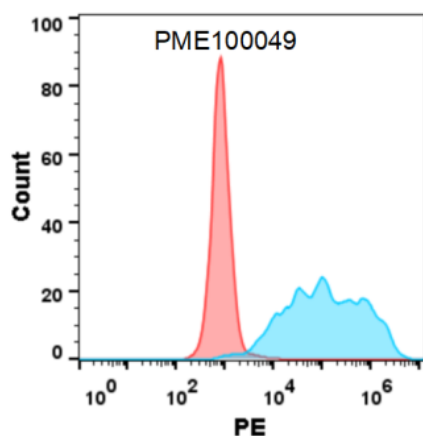


Figure 3. Flow cytometry analysis with 15  $\mu$ g/ml Human LIGHT Protein, hFc tag (11175) on Expi293 cells transfected with human HVEM (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).