

Rev03
Update: Dec,14,2021

DATASHEET

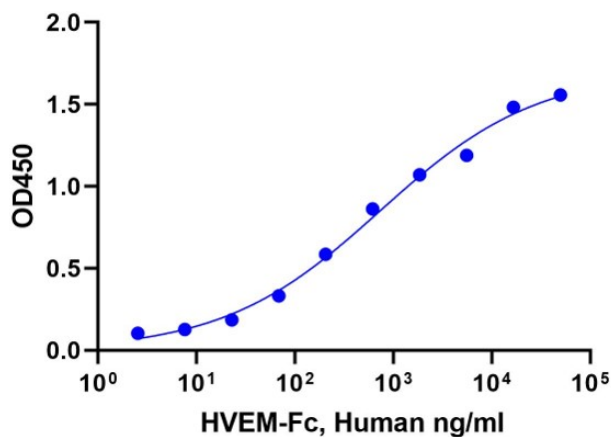
LIGHT, Human

Cat. No.: Z03560

Product Introduction

Species	Human
Protein Construction	LIGHT (Asp74 - Val240) Accession # O43557
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 1 EU/ μ g of protein by gel clotting method
Biological Activity	Immobilized LIGHT, Human at 2.0 μ g/ml (100 μ l/well) can bind HVEM-Fc, Human with EC_{50} =0.738 μ g/ml when detected by Mouse Anti-Human IgG FC-HRP.
Expression System	HEK 293
Apparent Molecular Weight	~15.6 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples



Immobilized LIGHT, Human (Z03560) at 2 µg/ml (100 µl/well) can bind HVEM-Fc, Human with EC₅₀=0.738 µg/ml when detected by Mouse Anti-Human IgG FC-HRP. Background was subtracted from data points before curve fitting.

Background

Target Background : LIGHT, also known as tumor-necrosis factor (TNF) superfamily member 14 (TNFSF14), is predominantly expressed on activated immune cells and some tumor cells. LIGHT (homologous to lymphotoxin, exhibits inducible expression and competes with Herpes Simplex Virus glycoprotein D for Herpes Virus Entry Mediator, a receptor expressed by T cells), is a protein primarily expressed on activated T cells, activated Natural Killer (NK) cells, and immature dendritic cells (DC). LIGHT can function as both a soluble and cell surface-bound type II membrane protein and must be in its homotrimeric form to interact with its two primary functional receptors: Herpes Virus Entry Mediator (HVEM) and Lymphotoxin-β Receptor (LTβR). LIGHT signaling through these receptors have distinct functions that are cell-type dependent, but interactions with both types of receptors have immune-related implications in tumor biology.

Synonyms : CD258 antigen; CD258; HVEM-L, LTg, TNFSF14, TR2, HVEML

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.