

Recombinant Mouse LIGHT/TNFSF14 (Mouse LIGHT/TNFSF14)

Product Information

Product Name	Cat#	Size
	90624ES08	5 µg
Recombinant Mouse LIGHT/TNFSF14 (Mouse LIGHT/TNFSF14)	90624ES60	100 µg
	90624ES76	500 µg

Product Description

LIGHT (lymphotoxin-like, exhibits inducible expression, and competes with HSV glycoprotein D for HVEM, a receptor expressed by T lymphocytes) is a member of the TNF superfamily and is designated TNFSF14. The gene for mouse LIGHT encodes a 239 amino acid residue (aa) type II transmembrane glycoprotein that contains a 37 aa N-terminal cytoplasmic domain, a 21 aa transmembrane region, and a 181 aa extracellular domain. A soluble form of mouse LIGHT is generated from the membrane form by proteolytic processing. Similar to other TNF ligand family members, LIGHT is assembled as a homotrimer. Mouse and human LIGHT share 71% aa sequence identity. LIGHT is expressed by activated lymphocytes, natural killer cells, immature dendritic cells, monocytes and granulocytes. Mouse LIGHT binds and signals via two distinct TNF receptor superfamily members, including the herpes virus entry mediator (HVEM/TNFRSF14) and the lymphotoxin beta receptor (LT beta R/TNFRSF3). In humans, LIGHT also binds the soluble human decoy receptor 3 (DcR3/TNFRSF6B).

Product Properties

Synonyms	CD258, HVEM-L
Accession	Q9QYH9
GeneID	50930
Source	E.coli-derived Mouse LIGHT/TNFSF14, Asp72-Val239.
Molecular Weight	Approximately 18.4 kDa.
AA Sequence	DGGKGSWEKL IQDQRSHQAN PAAHLTGANA SLIGIGGPLL WETRLGLAFL RGLTYHDGAL VTMEPGYYYV YSKVQLSGVG CPQGLANGLP ITHGLYKRTS RYPKELELLV SRRSPCGRAN SSRVWWDSSF LGGVVHLEAG EEVVVRVPGN RLVPRPDGTR SYFGAFMV
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cytotoxicity assay using human HT-29 cells is less than 2 µg/mL, corresponding to a specific activity of > 500 IU/mg in the presence of murine anti-polyHistidine monoclonal antibody and rHuIFN-γ. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in 100 mM HAc to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!