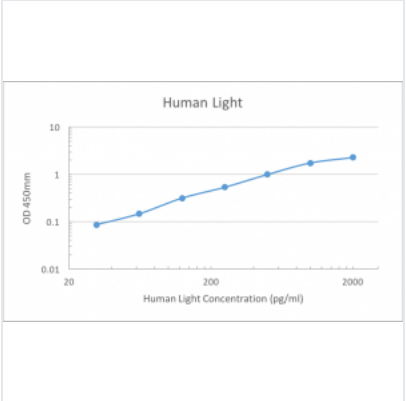
LIGHT ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	LIGHT, ELISA Kit
Full Product Name	Human LIGHT Pre-Coated ELISA Kit
Product Gene Name	LIGHT elisa kit
Species Reactivity	Human
Assay Type	Solid Phase Sandwich ELISA: 96-Well Strip Plate
Detection Range	31.2pg/ml-2000pg/ml
Sensitivity	<10pg/ml
Specificity	Natural and recombinant Human LIGHT
Preparation and Storage	Store the unopened product at 2-8 degree C.
Molecular Weight	26,350 Da
Chromosome Location	Chromosome: 19; NC_000019.9 (6663148..6670599, complement). Location: 19p13.3
OMIM	604520
3D Structure	ModBase 3D Structure for O43557
Components	Anti-Human LIGHT Pre-coated 96-well strip microplate Human LIGHT Standard Human LIGHT Biotinylated antibody (100x) Avidin-Biotin-Peroxidase Complex (100x) Sample Diluent Antibody Diluent Avidin-Biotin-Peroxidase Diluent Wash Buffer Concentrate (Powder for 1000mL) Color Developing Reagent Stop Solution Plate Sealers
Interference	No detectable cross-reactivity with other relevant proteins
Related Product Information for LIGHT elisa kit	LIGHT belongs to the TNF family of ligands, and can signal through the herpes virus entry mediator type A receptor (HVEM, TNFRSF14), LTbetaR, or bind to a decoy receptor, DcR3. It is expressed in splenocytes, activated PBL, CD8+ tumor infiltrating lymphocytes, granulocytes, and monocytes. LIGHT has the ability to active NF-kappaB, to co-stimulate the activation of lymphocytes and to induce apoptosis in certain human tumor cells. The human LIGHT gene encodes for a 240 amino acid type II transmembrane protein containing a 37 amino acid cytoplasmic domain, a 21 amino acid transmembrane domain, and a 182 amino acid extracellular domain. Human LIGHT Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure LIGHT with a 96-well strip plate that is pre-coated with mouse monoclonal antibody specific for LIGHT. It contains NS0-expressed recombinant LIGHT. The detection antibody is a biotinylated goat polyclonal antibody specific for LIGHT. The kit is analytically validated with ready to use reagents.
Other Notes	Small volumes of LIGHT elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for LIGHT purchase	MBS697400 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the LIGHT, ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing LIGHT. The ELISA analytical biochemical technique of the MBS697400 kit is based on LIGHT antibody-LIGHT antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect LIGHT antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, LIGHT. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of LIGHT elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for LIGHT. It may not necessarily be applicable to this product.

NCBI GI #	25952144
NCBI GeneID	8740
NCBI Accession #	NP_003798.2
UniProt Primary Accession #	O43557
UniProt Secondary Accession #	O75476; Q6FHA1; Q8WVF8; Q96LD2; A8K7M2; C9J5H4
UniProt Related Accession #	O43557
GenBank Nucleotide #	NM_003807.3
NCBI Official Full Name	tumor necrosis factor ligand superfamily member 14 isoform 1
NCBI Official Synonym Full Names	tumor necrosis factor (ligand) superfamily, member 14
NCBI Official Symbol	TNFSF14
NCBI Official Synonym Symbols	LTg; TR2; CD258; HVEML; LIGHT
UniProt Protein Name	Tumor necrosis factor ligand superfamily member 14
UniProt Synonym Protein Names	Herpes virus entry mediator ligand
Protein Family	Light-activated DNA-binding protein
UniProt Gene Name	TNFSF14
UniProt Synonym Gene Names	HVEML; LIGHT; HVEM-L
UniProt Entry Name	TNF14_HUMAN
NCBI Protein Information	tumor necrosis factor ligand superfamily member 14; delta transmembrane LIGHT; herpesvirus entry mediator A; herpesvirus entry mediator ligand; herpesvirus entry mediator-ligand; herpes virus entry mediator ligand; ligand for herpesvirus entry mediator; t

NCBI Summary for LIGHT	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. [provided by RefSeq, Jul 2008]
UniProt Comments for LIGHT	TNFSF14: Cytokine that binds to TNFRSF3/LTBR. Binding to the decoy receptor TNFRSF6B modulates its effects. Activates NFKB, stimulates the proliferation of T-cells, and inhibits growth of the adenocarcinoma HT-29. Acts as a receptor for Herpes simplex virus. Belongs to the tumor necrosis factor family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; Cytokine; Inhibitor Chromosomal Location of Human Ortholog: 19p13.3 Cellular Component: extracellular space; cytoplasm; plasma membrane; integral to membrane Molecular Function: protein binding; caspase inhibitor activity; cytokine activity; tumor necrosis factor receptor binding; receptor binding Biological Process: release of cytoplasmic sequestered NF-kappaB; T cell proliferation; T cell activation; apoptosis; T cell costimulation; T cell homeostasis; immune response; negative regulation of caspase activity; signal transduction; positive regulation of myoblast differentiation
Research Articles on LIGHT	**1.** findings show that LIGHT is not inhibited by the soluble RANKL receptor OPG and that LIGHT is a potent osteoclastogenesis factor that activates the Akt, NFkappaB and JNK pathways
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