

LIGHT (FL-240): sc-28880

BACKGROUND

Herpes virus entry mediator (HVEM), a type I transmembrane protein, is a member of the TNF receptor superfamily. HVEM mediates the entry of herpes simplex virus (HSV)-1 and -2 into T lymphocytes by serving as an attachment site for the HSV envelope glycoprotein D (gD). HVEM also binds two cellular ligands, secreted lymphotoxin α and LIGHT. LIGHT is a member of the TNF superfamily produced by activated T cells. This type II transmembrane protein competes with HSV glycoprotein D for binding to HVEM. LIGHT is closely related in sequence to lymphotoxin β (LT β) and can also bind to the LT β receptor. LIGHT is also known to induce apoptosis and suppress tumor formation. The gene encoding LIGHT maps to human chromosome 19p13.3.

REFERENCES

1. Montgomery, R.L., et al. 1996. Herpes simplex virus-1 entry into cells mediated by a novel member of the TNF/NGF receptor family. *Cell* 87: 427-436.
2. Marsters, S.A., et al. 1997. Herpes virus entry mediator, a member of the tumor necrosis factor receptor (TNFR) family, interacts with members of the TNFR-associated factor family and activates the transcription factors NF κ B and AP-1. *J. Biol. Chem.* 30: 14029-14032.

CHROMOSOMAL LOCATION

Genetic locus: TNFSF14 (human) mapping to 19p13.3; Tnfsf14 (mouse) mapping to 17 D.

SOURCE

LIGHT (FL-240) is a rabbit polyclonal antibody raised against amino acids 1-240 representing full length LIGHT of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

LIGHT (FL-240) is recommended for detection of LIGHT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LIGHT siRNA (h): sc-39674, LIGHT siRNA (m): sc-39677, LIGHT shRNA Plasmid (h): sc-39674-SH, LIGHT shRNA Plasmid (m): sc-39677-SH, LIGHT shRNA (h) Lentiviral Particles: sc-39674-V and LIGHT shRNA (m) Lentiviral Particles: sc-39677-V.

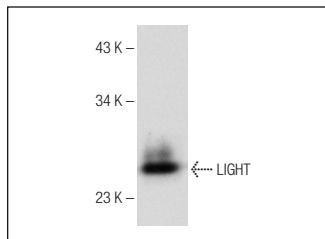
Molecular Weight of LIGHT: 29 kDa.

Positive Controls: mouse spleen extract: sc-2391 or mouse liver extract: sc-2256.

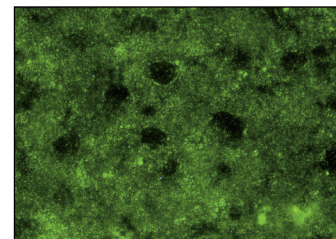
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



LIGHT (FL-240): sc-28880. Western blot analysis of LIGHT expression in rat spleen tissue extract.



LIGHT (FL-240): sc-28880. Immunofluorescence staining of normal mouse liver frozen section showing cytoplasmic and extracellular staining.

SELECT PRODUCT CITATIONS

1. Aebischer, J., et al. 2011. IFN γ triggers a LIGHT-dependent selective death of motoneurons contributing to the non-cell-autonomous effects of mutant SOD1. *Cell Death Differ.* 18: 754-768.
2. Aebischer, J., et al. 2012. Elevated levels of IFN γ and LIGHT in the spinal cord of patients with sporadic amyotrophic lateral sclerosis. *Eur. J. Neurol.* 19: 752-759, e45-e46.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **LIGHT (4E3): sc-293480**, our highly recommended monoclonal alternative to LIGHT (FL-240).