

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LIGHT/TNFSF14 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG ₁ Clone # 2323A
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LIGHT/TNFSF14 Asp74-Val240 Accession # O43557
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

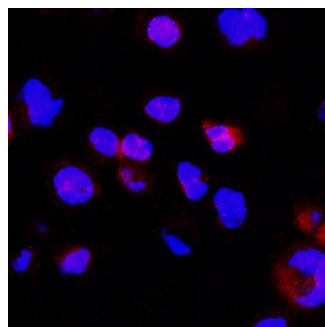
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



LIGHT/TNFSF14 in HDLM-2 Human Cell Line. LIGHT/TNFSF14 was detected in immersion fixed HDLM-2 human Hodgkin's lymphoma cell line using Mouse Anti-Human LIGHT/TNFSF14 Monoclonal Antibody (Catalog # MAB6641) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human LIGHT, also known as TNFSF14, is a type II membrane protein that is a member of the TNF superfamily. LIGHT is an acronym which stands for "is homologous to lymphotoxins, exhibits inducible expression, and competes with HSV glycoprotein D for HVEM, a receptor expressed by T lymphocytes". LIGHT has also been called HVEM-L and LT-γ. LIGHT is a 240 amino acid (aa) protein that contains a 37 aa cytoplasmic domain, a 22 aa transmembrane region, and a 181 aa extracellular domain. Similar to other TNF ligand family members, LIGHT is predicted to assemble as a homotrimer. LIGHT is produced by activated T cells and was first identified by its ability to compete with HSV glycoprotein D for HVEM binding. LIGHT has also been shown to bind to the lymphotoxin beta receptor (LTβR) and the decoy receptor (DcR3/TR6). LIGHT overexpression in tumor cells induces apoptosis, which can be enhanced by IFN-γ.

References:

1. Mauri, D.N. *et al.* (1998) *Immunity* **8**:21.
2. Zhai, Y. *et al.* (1998) *J. Clin. Invest.* **102**:1142.
3. Harrop, J.A. *et al.* (1998) *J. Biol. Chem.* **273**:27548.
4. Yu, K-Y. *et al.* (1999) *J. Biol. Chem.* **274**:13733.