

DESCRIPTION

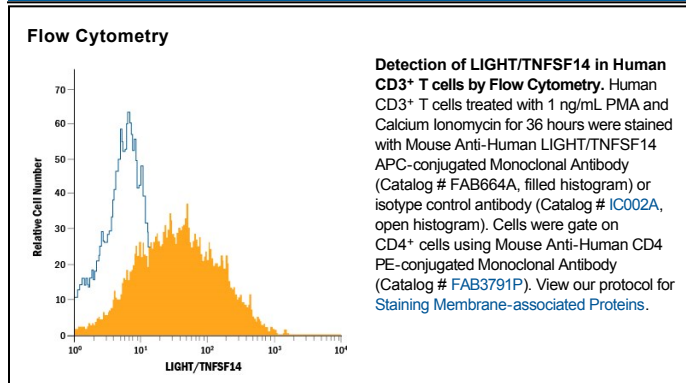
Species Reactivity	Human
Specificity	Detects human LIGHT/TNFSF14 in ELISAs. In sandwich immunoassays, no significant cross-reactivity or interference with recombinant human (rh) Fas Ligand, rhAPRIL, recombinant mouse TRANCE, rhTNF- α or rhTRAIL is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 115520
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LIGHT/TNFSF14 Asp74-Val240 Accession # O43557
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

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 (LT β R) 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.