

TotalSeq™-C1056 anti-human CD258 (LIGHT) Antibody

Catalog# / Size	318711 / 10 µg
Clone	T5-39
Regulatory Status	RUO
Other Names	LIGHT, TL5, TNFSF14, TR2 ligand, Ligand for herpesvirus entry mediator, tumor necrosis factor receptor-like-2 ligand, tumor necrosis factor ligand superfamily member 14 (TNFSF14)
Isotype	Mouse IgG2b, κ
Barcode Sequence	ACTTCCCTGTAGAAA
Description	The T5-39 antibody recognizes human LIGHT (CD258) also known as ligand for herpesvirus entry mediator, tumor necrosis factor receptor-like-2 ligand, TR2 ligand, and tumor necrosis factor ligand superfamily member 14 (TNFSF14). LIGHT is a type 2 transmembrane protein, and a member of the tumor necrosis factor ligand superfamily. LIGHT can be proteolytically cleaved and two isoforms have been shown to be produced by alternative splicing. The apparent molecular weight of LIGHT is approximately 30 kD. LIGHT expression has been observed in spleen, brain and kidney; expression is upregulated on activated T cells (particularly CD8 ⁺ cells). LIGHT stimulates proliferation of T cells and inhibits growth of some tumor cells. This protein has been shown to play a role in intestinal inflammation and contribute to IgA nephropathy. LIGHT is a ligand for HVEM, and LTβR and has also been shown to bind DcR3 and modulate function. In addition, LIGHT has been shown to interact with other proteins including TRAF2, TRAF3, and DIABLO. The T5-39 antibody has been shown to be useful for flow cytometry and ELISA.

Product Details

Verified Reactivity	Human, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	recombinant human LIGHT (TL5) protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq™-C oligomer under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	PG - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. TotalSeq™-C antibodies are compatible with 10x Genomics Chromium Single Cell Immune Profiling Solution.</p> <p>To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.</p> <p>Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.</p>
Additional Product Notes	TotalSeq™ reagents are designed to profile protein levels at a single cell level following an

optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. [10x Genomics Chromium System and Reagents](#)) and sequencer (e.g. Illumina analyzers) are required. Please contact [technical support](#) for more information, or visit [biolegend.com/totalseq](#).

The barcode flanking sequences are CGGAGATGTGTATAAGAGACAGNNNNNNNNNN (PCR handle), and NNNNNNNNNCCCATATAAGA*A*A (capture sequence). N represents either randomly selected A, C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

RRID AB_2832625 (BioLegend Cat. No. 318711)

Antigen Details

Structure	Type 2 transmembrane protein, member of the tumor necrosis factor ligand superfamily. Can be proteolytically cleaved; two isoforms produced by alternative splicing. Apparent molecular weight approximately 30 kD.
Distribution	Spleen, brain and kidney. Upregulated on activated T cells (particularly CD8 ⁺ cells)
Function	Stimulates proliferation of T cells, inhibits growth of some tumor cells. Has been shown to play a role in intestinal inflammation and contribute to IgA nephropathy
Interaction	TRAF2, TRAF3, DIABLO
Ligand/Receptor	Ligand for HVEM, LTβR. Has also been shown to bind DcR3
Cell Type	T cells
Biology Area	Cell Biology, Immunology
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	<ol style="list-style-type: none">1. Mauri DN, <i>et al.</i> 1998. <i>Immunity</i> 8:21.2. Harrop JA, <i>et al.</i> 1998. <i>J. Biol. Chem.</i> 273:27548.3. Morel Y, <i>et al.</i> 2000. <i>J. Immunol.</i> 165:4397.4. Wang J, <i>et al.</i> 2004. <i>J. Clin. Invest.</i> 113:826.5. Yu P, <i>et al.</i> 2004. <i>Nature Immunol.</i> 5:141.
Gene ID	8740

Related Protocols

[TotalSeq™-B or -C with 10x Feature Barcoding Technology](#)

Other Formats

Biotin anti-human CD258 (LIGHT), PE anti-human CD258 (LIGHT), PE/Cyanine7 anti-human CD258 (LIGHT), APC anti-human CD258 (LIGHT), TotalSeq™-C1056 anti-human CD258 (LIGHT), TotalSeq™-D1056 anti-human CD258 (LIGHT), TotalSeq™-B1056 anti-human CD258 (LIGHT)

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