

TotalSeq™-A0885 anti-mouse CD270 (HVEM) Antibody

Catalog# / Size	136307 / 10 µg
Clone	HMHV-1B18
Regulatory Status	RUO
Other Names	Herpes virus entry mediator, TR2, tumor necrosis factor receptor like 2, TNFRSF14, HVEM
Isotype	Armenian Hamster IgG
Barcode Sequence	GATCCGTGTTGCCTA
Description	Herpes Virus Entry Mediator (HVEM, TR2) is a type I transmembrane protein of TNF-receptor superfamily. This receptor was identified as a cellular mediator of herpes simplex virus (HSV) entry. Binding of HSV viral envelope glycoprotein D to this receptor has been shown to be part of the viral entry mechanism. It is expressed on most cell types, including T cells, B cells, monocytes, neutrophils, and dendritic cells. It is also found in brain, heart, kidney, liver, and other organs. The ligands of HVEM are LIGHT, BTLA, LT α , and CD160. HVEM activates NF- κ B through the TNF-related cytokine LIGHT to serve as a costimulatory pathway during T cell activation. HVEM also functions as a ligand for the Ig superfamily members B and T lymphocyte attenuator (BTLA) and CD160 to deliver a coinhibitory signal and limit inflammatory responses initiated by T cells. HVEM plays an important role in regulating lymphocyte activation and homeostasis in immune responses.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Immunogen	Mouse HVEM-hlgG1Fc fusion 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™-A 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	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™-A antibodies are compatible with 10x Genomics Single Cell Gene Expression Solutions . 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. 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.
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 CCTTGGCACCCGAGAATTCCA (PCR handle), and BAAA*^{*}A (capture sequence). B represents either 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](#).

Product Citations

1. Guilliams M, *et al.* 2022. *Cell*. 185:379. [PubMed](#)

RRID

AB_2810403 (BioLegend Cat. No. 136307)

Antigen Details

Structure	A type I transmembrane protein of TNF-receptor superfamily.
Distribution	It is expressed on most cell types, including T cells, B cells, monocytes, neutrophils, and dendritic cells. It is also found in brain, heart, kidney, liver, and other organs.
Function	Play an important role in regulating lymphocyte activation and homeostasis in immune responses.
Ligand/Receptor	LIGHT, BTLA, LT α , CD160
Cell Type	B cells, Dendritic cells, Neutrophils
Biology Area	Cell Adhesion, Cell Biology, Immunology, Signal Transduction
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">1. Fan Z, <i>et al.</i> 2006. <i>Blood</i> 107(4):13422. Granger SW, <i>et al.</i> 2008. <i>Stem Cells</i>. 27:6533. Kwon BS, <i>et al.</i> 1997. <i>J. Biol. Chem.</i> 272:134714. Gonzalez LC, <i>et al.</i> 2005. <i>Proc. Nat. Acad. Sci. U. S. A.</i> 102:11165. Montgomery RI, <i>et al.</i> 1996. <i>Cell</i>. 87:4276. Cheung TC, <i>et al.</i> 2009. <i>Proc. Nat. Acad. Sci. U. S. A.</i> 106 (15):62447. Cai G, <i>et al.</i> 2009. <i>Immunol. Rev.</i> 229(1):244
Gene ID	230979

Related Protocols

[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 Protocol](#)

Other Formats

Purified anti-mouse CD270 (HVEM), PE anti-mouse CD270 (HVEM), APC anti-mouse CD270 (HVEM), TotalSeq™-A0885 anti-mouse CD270 (HVEM), TotalSeq™-C0885 anti-mouse CD270 (HVEM)

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