

Biotin anti-human CD56 (NCAM) Antibody

Catalog# / Size	318319 / 25 µg 318320 / 100 µg
Clone	HCD56
Regulatory Status	RUO
Other Names	Leu-19, NKH1
Isotype	Mouse IgG1, κ
Description	CD56 is a single transmembrane glycoprotein also known as NCAM (Neural Cell Adhesion Molecule), Leu-19, or NKH1. It is a member of the Ig superfamily. The 140 kD isoform is expressed on NK cells and NK-T cells. CD56 is also expressed in the brain (cerebellum and cortex) and at neuromuscular junctions. Certain large granular lymphocyte (LGL) leukemias, small-cell lung carcinomas, neuronal derived tumors, myelomas, and myeloid leukemias also express CD56. CD56 plays a role in homophilic and heterophilic adhesion via binding to itself or heparin sulfate.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with biotin 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	FC - Quality tested IF - Verified
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Clone HCD56 is not recommended for immunohistochemistry formalin-fixed paraffin-embedded tissue.
Application References	1. Kishimoto T, <i>et al.</i> Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London. 2. Correia DV, <i>et al.</i> 2011. <i>Blood</i> 118:992. (FC) PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	1. Riether C, <i>et al.</i> 2021. <i>Cell Reports</i> . 34(4):108663. PubMed 2. Hinterbrandner M, <i>et al.</i> 2021. <i>JCI Insight</i> . 6:e151797. PubMed 3. Evren E, <i>et al.</i> 2020. <i>Immunity</i> . 54(2):259-275.e7. PubMed 4. Bourdely P, <i>et al.</i> 2020. <i>Immunity</i> . 53(2):335-352. PubMed 5. Sarkar TJ, <i>et al.</i> 2020. <i>Nat Commun</i> . 11:1545. PubMed 6. Quarta M, <i>et al.</i> 2016. <i>Nat Biotechnol</i> . 10.1038/nbt.3576. PubMed 7. Goods BA, <i>et al.</i> 2021. <i>JCI Insight</i> . 6: . PubMed 8. An X, <i>et al.</i> 2017. <i>PLoS One</i> . 10.1371/journal.pone.0181904. PubMed 9. Hirota K <i>et al.</i> 2018. <i>Immunity</i> . 48(6):1220-1232 . PubMed 10. Heyde A, <i>et al.</i> 2021. <i>Cell</i> . 184(5):1348-1361.e22. PubMed 11. Askenase MH, <i>et al.</i> 2021. <i>Sci Immunol</i> . 6: . PubMed

RRID AB_893392 (BioLegend Cat. No. 318319)
AB_893390 (BioLegend Cat. No. 318320)

Antigen Details

Structure	Ig superfamily, single transmembrane or GPI-anchored glycoprotein
Distribution	NK cells, T subset, neural tissue, some LGL and myeloid leukemias
Function	Adhesion
Ligand/Receptor	Heparin sulfate
Cell Type	B cells, Leukemia, Mesenchymal Stem Cells, Neurons, NK cells, T cells
Biology Area	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Stem Cells, Synaptic Biology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Lanier L, <i>et al.</i> 1991. <i>J. Immunol.</i> 146:4421. 2. Hemperly J, <i>et al.</i> 1990. <i>J. Mol. Neurosci.</i> 2:71. 3. Cremer H, <i>et al.</i> 1994. <i>Nature</i> 367:455.
Gene ID	4684

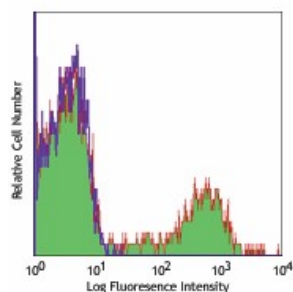
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

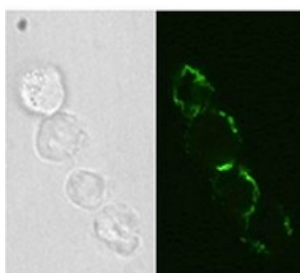
Other Formats

Purified anti-human CD56 (NCAM), FITC anti-human CD56 (NCAM), PE anti-human CD56 (NCAM), PE/Cyanine5 anti-human CD56 (NCAM), APC anti-human CD56 (NCAM), Alexa Fluor® 488 anti-human CD56 (NCAM), Alexa Fluor® 647 anti-human CD56 (NCAM), Alexa Fluor® 700 anti-human CD56 (NCAM), PE/Cyanine7 anti-human CD56 (NCAM), Biotin anti-human CD56 (NCAM), PerCP/Cyanine5.5 anti-human CD56 (NCAM), Pacific Blue™ anti-human CD56 (NCAM), APC/Cyanine7 anti-human CD56 (NCAM), Brilliant Violet 421™ anti-human CD56 (NCAM), Brilliant Violet 570™ anti-human CD56 (NCAM), Brilliant Violet 605™ anti-human CD56 (NCAM), Brilliant Violet 711™ anti-human CD56 (NCAM), Brilliant Violet 510™ anti-human CD56 (NCAM), PerCP anti-human CD56 (NCAM), Brilliant Violet 650™ anti-human CD56 (NCAM), Purified anti-human CD56 (NCAM) (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD56 (NCAM)

Product Data



Human peripheral blood lymphocytes stained with biotinylated HCD56, followed by Sav-PE



Human NK-92 cells were stained with CD56 (clone HCD56) Biotin, and then secondarily stained with Streptavidin-Alexa Fluor® 488. Cells were imaged with a Zeiss Axio Observer Z1 spinning disc confocal, average exposure time ~0.23 seconds. Credit: Dr. Jordan Orange and Dr. Emily Mace, University of Pennsylvania School of Medicine Children's Hospital of Philadelphia, Division of Immunology.

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