

PE anti-human CD57 Antibody

Catalog# / Size	359611 / 25 tests 359612 / 100 tests
Clone	HNK-1
Regulatory Status	RUO
Other Names	HNK-1, NK-1, Leu-7
Isotype	Mouse IgM, κ
Description	CD57, also known as HNK-1, NK-1, and Leu-7 is a 100-115 kD oligosaccharide antigenic determinant expressed on a variety of proteins, lipids, and chondroitin sulfate proteoglycans. CD57 is expressed on a subset of peripheral blood lymphocytes, including NK cells and CD8 ⁺ T cells, and is also expressed on neural cells and striated muscle. CD57 is not expressed on red blood cells, granulocytes, monocytes, or platelets. While the function of CD57 is unknown, binding to L-selectin, P-selectin, and a fragment of laminin suggests that CD57 may be involved in cell-matrix interactions. CD57 is increased in some disease states associated with CD4/CD8 imbalances (AIDS, autoimmune disease, viral infections, and allograft transplants).

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Membrane extract of human lymphoblastoid cell line HSB-2.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications for the relevant formats include: Western blotting ¹ .
Application References (PubMed link indicates BioLegend citation)	1. Yoshihara Y, <i>et al.</i> 1991. <i>J. Cell Biol.</i> 115:731. (WB) 2. Abo T, <i>et al.</i> 1981. <i>J. Immunol.</i> 127:1024. 3. Abo T, <i>et al.</i> 1982. <i>J. Immunol.</i> 129:1752. 4. Abo T, <i>et al.</i> 1982. <i>J. Immunol.</i> 129:1758.
RRID	AB_2562758 (BioLegend Cat. No. 359611) AB_2562759 (BioLegend Cat. No. 359612)

Antigen Details

Structure	Oligosaccharide antigenic determinant present on a variety of proteins, lipids, and chondroitin sulfate proteoglycans, 100-115 kD. The antigen is conserved across species.
Distribution	CD57 antigen is expressed on a subset of peripheral blood lymphocytes including a subset of NK cells and a subset of CD8 ⁺ T cells. Also expressed on neural cells and striated muscle.
Function	Unknown function, may be involved in cell-matrix interactions.
Ligand/Receptor	Binds to L-selectin and P-selectin in a calcium-dependent manner, also binds to second globular domain of E8 laminin fragment.
Cell Type	Lymphocytes, NK cells, T cells
Biology Area	Immunology, Costimulatory Molecules
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Schubert J, <i>et al.</i> 1989. In <i>Leucocyte Typing IV</i> (Knapp W, ed) Oxford University Press Oxford pp 711-714. 2. Palmer BE, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:8415. 3. Schachner M, <i>et al.</i> 1995. <i>Trends Neurosci.</i> 18:183. 4. Wood KL, <i>et al.</i> 2005. <i>Clin. Immunol.</i> 117:294.
Gene ID	27087

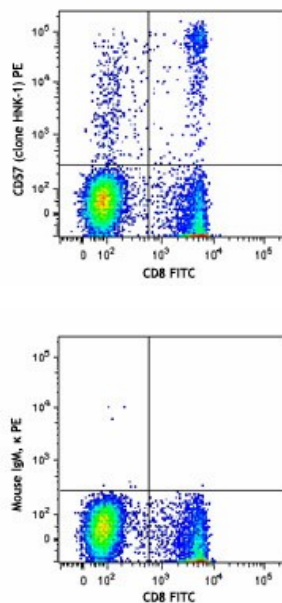
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD57, FITC anti-human CD57, Pacific Blue™ anti-human CD57, APC anti-human CD57, PE anti-human CD57, Alexa Fluor® 647 anti-human CD57, Biotin anti-human CD57, PE/Dazzle™ 594 anti-human CD57, PerCP/Cyanine5.5 anti-human CD57, PE/Cyanine7 anti-human CD57, Alexa Fluor® 594 anti-human CD57

Product Data



Human peripheral blood lymphocytes were stained with CD8 FITC and CD57 (clone HNK-1) PE (top) or mouse IgM, κ PE isotype control (bottom).

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