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# Product Data Sheet

# PE anti-human CD57

**Catalog # / Size:** 322311 / 25 tests
322312 / 100 tests

**Clone:** HCD57

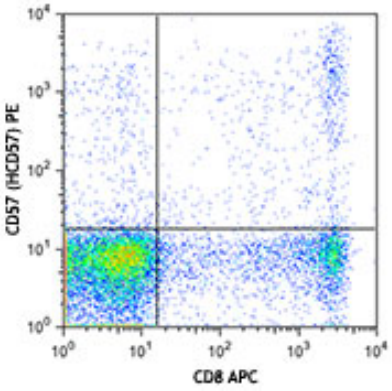
**Isotype:** Mouse IgM, κ

**Reactivity:** Human

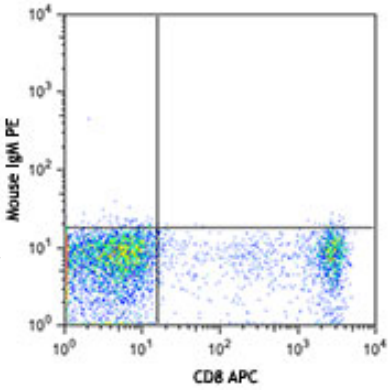
**Preparation:** The antibody was conjugated with PE under optimal conditions, and is at >85% purity. The solution is free of unconjugated PE and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**




*Human peripheral blood lymphocytes were stained with CD8 APC and CD57 (clone HCD57) PE (top), or mouse IgM PE isotype control (bottom).*




# Applications:

**Applications:** FC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

**Application Notes:** The HCD57 antibody has been shown to recognize human CD57 and to be useful for flow cytometry.

**Application References:**
1. Kaplan RC, *et al.* 2011. *J. Infect Dis.* 10:76. PubMed
2. Lutz CT, *et al.* 2011. *J. Immunol.* 186:4590. PubMed

**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 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).

**Antigen References:**
1. Schubert J, *et al.* 1989. In Leucocyte Typing IV (Knapp W, ed) Oxford University Press Oxford pp 711-714.
2. Palmer BE, *et al.* 2005. *J. Immunol.* 175:8415.
3. Schachner M, *et al.* 1995. *Trends Neurosci.* 18:183.
4. Wood KL, *et al.* 2005. *Clin. Immunol.* 117:294.

**Related Products:**

| Product | Clone | Application |
|---|---|---|
| Cell Staining Buffer | | FC, ICC, ICFC |
| RBC Lysis Buffer (10X) | | FC, ICFC |
| PE Mouse IgM, κ Isotype Ctrl | MM-30 | FC, ICFC |
| Human TruStain FcX™ (Fc Receptor Blocking Solution) | | FC, ICC, ICFC |



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