

Pacific Blue™ anti-human CD57

Catalog # / Size: 2398035 / 25 tests
2398040 / 100 tests

Clone: HNK-1

Isotype: Mouse IgM, κ

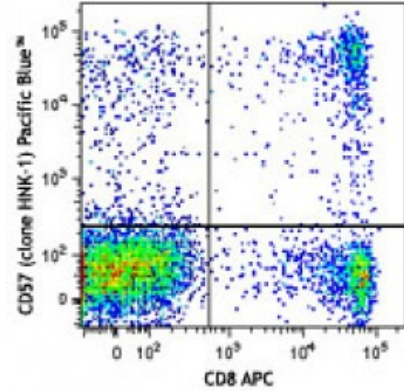
Immunogen: Membrane extract of human lymphoblastoid cell line HSB-2.

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

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

Concentration: Lot-specific

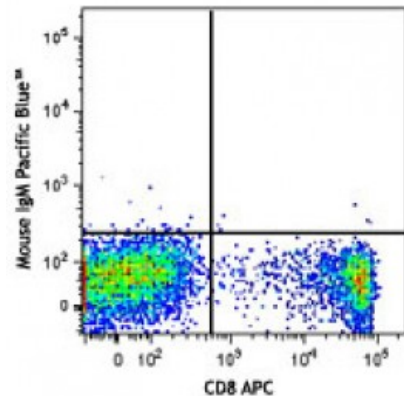


Human peripheral blood lymphocytes were stained with CD8 APC and CD57 (clone HNK-1) Pacific Blue™ (top) or mouse IgM Pacific Blue™ isotype control (bottom).

Applications:

Applications: Flow Cytometry

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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: Additional reported applications for the relevant formats include: Western blotting1.

- Application References:**
1. Yoshihara Y, *et al.* 1991. *J. Cell Biol.* 115:731. (WB)
 2. Abo T, *et al.* 1981. *J. Immunol.* 127:1024.
 3. Abo T, *et al.* 1982. *J. Immunol.* 129:1752.
 4. Abo T, *et al.* 1982. *J. Immunol.* 129:1758.

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).

**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 Neurosc*