SONY

Alexa Fluor® 647 anti-human CD57

Catalog # / Size:	2398065 / 25 tests 2398070 / 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 Alexa Fluor® 647 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Concentration:	Lot-specific
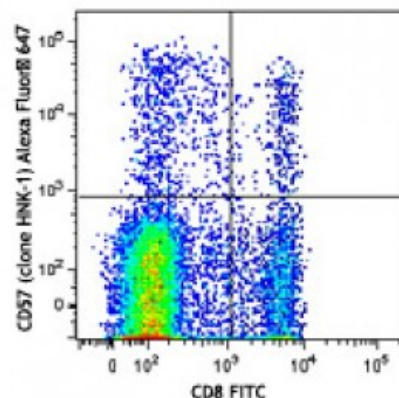
Human peripheral blood lymphocytes were stained with CD8 FITC and CD57 (clone HNK-1) Alexa Fluor® 647 (top) or mouse IgM, κ Alexa Fluor 647® isotype control (bottom).

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. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.
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.
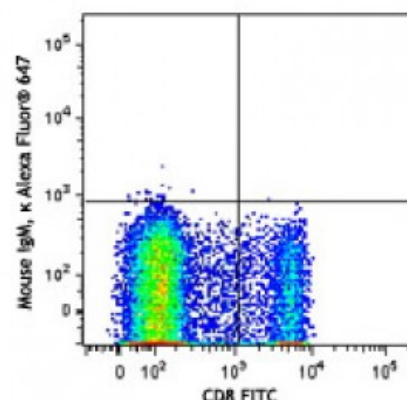
Description:	CD57, also known as HNK-1, NK-1, and Leu-7 is a 100-115 kD oligosaccharide antigenic determinant expressed on a variety of proteins, lipids, and chondroitin sulfate proteoglycans. CD57 is expressed on a subset of peripheral blood lymphocytes, including NK cells and CD8$^+$ T cells, and is 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*