SONY

Product Data Sheet

PE anti-mouse PLZF

Catalog # / Size: 1329020 / 100 µg
1329015 / 25 µg

Clone: 9E12

Isotype: Hamster IgG

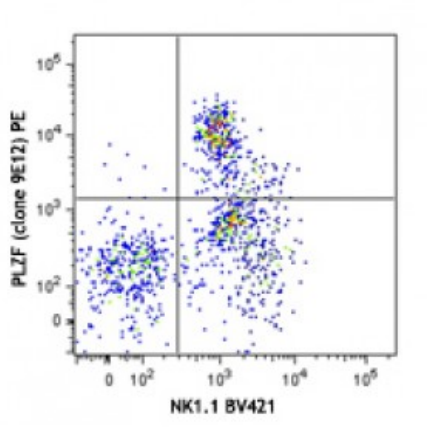
Immunogen: Combination of peptides covering the amino, carboxyl and hinge regions of the PLZF.

Reactivity: Mouse

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

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2

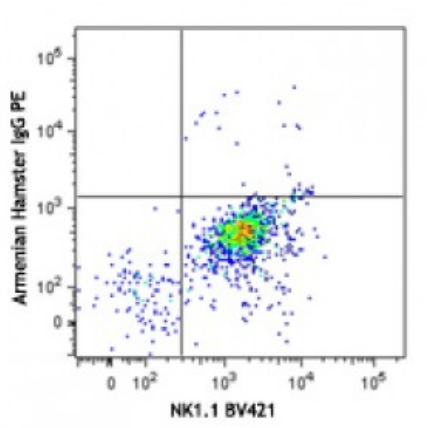


C57BL/6 mouse leukocytes from mouse liver were surface stained with CD45 PerCP, CD8 Alexa Fluor® 488, and NK1.1 Brilliant Violet 421™. Cells were then fixed and permeabilized with 1% PFA plus 70% ethanol, followed by intracellular staining with

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis using 1% PFA plus 70% ethanol. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



Description: PLZF (promyelocytic leukemia zinc finger), also known as Zbtb16, Zinc finger and BTB domain-containing protein 16, Zfp145, is a member of the BTB-POZ family of transcription factors. It was first identified in a patient with acute promyelocytic leukemia, where a reciprocal chromosomal translocation *t*(11;17)(q23;q21) resulted in a fusion with *RARA* gene encoding retinoic acid receptor α. Expression of this transcriptional repressor in immune cells differs between human and mouse. In humans, PLZF is expressed in $CD34^+$ progenitor cells and in primitive multipotent hematopoietic cell lines, NK cells, γ/δ T cells, $CD4^+$ and $CD8^+$ T cells. It is also expressed in MR1-specific mucosal-associated invariant T cells as well as in MHC class II-restricted T cells that develop via a thymocyte-thymocyte interaction. PLZF is involved in NK cell function, cellular quiescence, and growth suppression. It also inhibits gene expression induced by retinoic acid receptor. In mice, PLZF is highly expressed in immature CD1d-resricted invariant NKT (iNKT) cells, a subset of γ/δ ($Vg1.1^+Vd6.3^+$) T cells, and non-invariant CD1d-restricted T cells. PLZF exists as a homodimer or in complex with PLZP, and has been shown

to be involved in the development of NKT cells. It is also reported to be expressed in embryonic tissues, giving rise to hematopoietic progenitors.

Antigen References:

1. Constantinides MG, *et al.* 2011. *J. Immunol.* 187:309.
2. Kovalovsky D, *et al.* 2008. *Nat. Immunol.* 9:1055.
3. Chen Z, *et al.* 1993. *EMBO J.* 12:1161.
4. Chen Z, *et al.* 1994