

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse PLZF in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 816421
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse PLZF Met1-Gln254 Accession # NP_001028496
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	See Below

DATA

Intracellular Staining by Flow Cytometry

Detection of PLZF in Mouse Splenocytes by Flow Cytometry.
 Mouse splenocytes stimulated with Recombinant Mouse IL-12 (Catalog # 419-ML) and Recombinant Mouse IL-18 (Catalog # 9139-IL) for 3 days were stained with Rat Anti-Mouse Nkp46/NCR1 PE-conjugated Monoclonal Antibody (Catalog # FAB22252P) and either (A) Rat Anti-Mouse PLZF Monoclonal Antibody (Catalog # MAB29441) or (B) Rat IgG_{2A} Isotype Control (Catalog # MAB006) followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Mouse PLZF, also known as Zinc finger and BTB domain containing protein 16 (ZBTB-16) PLZF and ZNF145, is a 74 kDa nuclear protein that belongs to the POK family of transcriptional repressors. It is a 673 amino acid (aa) protein that contains an N-terminal BTB domain, followed by an acidic domain, a proline-rich region and a C-terminal zinc finger domain. PLZF forms dimers with RARα and LAZ3 within its zinc finger region. Alternate splice forms exist that are tissue-specific and show a deletion of either the BTB domain, the acidic region, or the proline-rich region. PLZF is highly expressed in undifferentiated, multi-potential hematopoietic progenitor cells, with levels declining as cells commit to various lineages. Mouse PLZF shares 98% and 96% aa identity with rat and human PLZF, respectively.