

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PLZF in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) ZBTB38, rhZNF24, rhZNF143, rhZNF206, rhZNF281, or rhZNF423 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 6318100
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PLZF Met1-Gln254 Accession # Q05516
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

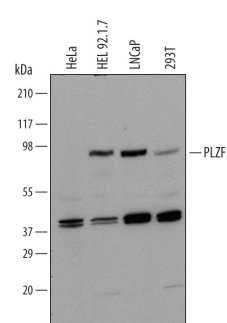
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

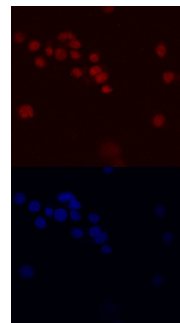
DATA

Western Blot



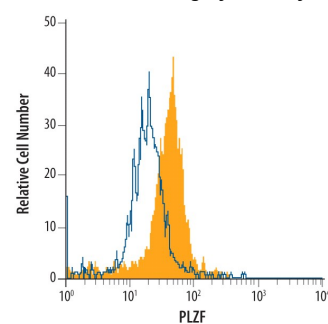
Detection of Human PLZF by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, HEL 92.1.7 human erythroleukemic cell line, LNCaP human prostate cancer cell line, and 293T human embryonic kidney cell line. PVDF Membrane was probed with 1 µg/mL of Human PLZF Monoclonal Antibody (Catalog # MAB2944) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PLZF at approximately 85 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



PLZF in HL-60 Human Cell Line. PLZF was detected in immersion fixed HL-60 human acute promyelocytic leukemia cell line using Human PLZF Monoclonal Antibody (Catalog # MAB2944) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

Intracellular Staining by Flow Cytometry



Detection of in HL-60 Human Cell Line by Flow Cytometry. HL-60 human acute promyelocytic leukemia cell line was stained with Human PLZF Monoclonal Antibody (Catalog # MAB2944, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG F(ab')₂ Secondary Antibody (Catalog # F0102B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

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

Human PLZF is a 74 kDa nuclear protein that belongs to the POK family of transcriptional repressors. It is a 673 amino acid 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 homodimers with RAR α and LAZ3 with its zinc-finger region. Alternate splice forms exist which are tissue-specific and show a deletion of either the BTB domain, the acidic region, or the proline-rich region. Human PLZF shares 96%, 97%, 96%, and 96% amino acid identity with rat, mouse, canine, and bovine PLZF, respectively.