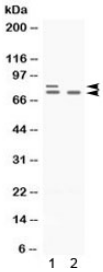
PLZF Antibody / Promyelocytic Leukemia Zinc Finger Protein Antibody (R32406)

Catalog No.	Formulation	Size
R32406	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q05516
Applications	Western blot: 0.5-1ug/ml
Limitations	This PLZF Antibody / Promyelocytic Leukemia Zinc Finger Protein Antibody is available for research use only.



PLZF Antibody Human, Rat and Mouse WB. Western blot analysis of human Ramos (lane 1) and HeLa (lane 2) whole cell lysates, rat testis (lane 3) and PC-12 (lane 4), and mouse testis (lane 5) and RAW264.7 (lane 6) cell lysates using PLZF Antibody / Promyelocytic Leukemia Zinc Finger Protein Antibody at 0.5 ug/ml. A specific band is detected at approximately 74 kDa, consistent with the predicted molecular weight of PLZF (ZBTB16). Additional closely migrating bands are observed in rat testis, which may reflect post-translationally modified forms or tissue-specific isoforms reported for this transcription factor. This PLZF Antibody, also called Promyelocytic Leukemia Zinc Finger Protein Antibody, is suitable for studies of transcriptional repression, stem cell biology, immune development, and epigenetic regulation.

Description

PLZF Antibody / Promyelocytic Leukemia Zinc Finger Protein Antibody recognizes PLZF, a transcription factor encoded by the ZBTB16 gene that belongs to the BTB/POZ zinc finger family of DNA-binding proteins. PLZF functions primarily as a transcriptional repressor by recruiting chromatin remodeling complexes and histone deacetylases to specific target

genes, thereby controlling cellular differentiation, proliferation, and developmental programs. Since its original discovery as a fusion partner in acute promyelocytic leukemia, PLZF has become one of the best-characterized BTB-zinc finger transcription factors and remains widely studied under its historical name in both basic and translational research.

PLZF contains an amino-terminal BTB/POZ domain that mediates interactions with transcriptional corepressors and multiple carboxyl-terminal zinc finger motifs that bind DNA in a sequence-specific manner. Through these domains, PLZF regulates genes involved in stem cell maintenance, hematopoiesis, spermatogenesis, skeletal development, and immune cell differentiation. The protein also influences chromatin organization and epigenetic regulation, allowing long-term control of lineage-specific gene expression. PLZF-mediated transcriptional repression is essential for maintaining cellular identity while coordinating differentiation in response to developmental and environmental signals.

PLZF is highly expressed in several stem and progenitor cell populations and plays indispensable roles in natural killer T cells, innate lymphoid cells, hematopoietic stem cells, and germ cell development. Altered PLZF expression has been associated with leukemia, lymphoma, prostate cancer, melanoma, and other malignancies, as well as developmental abnormalities and immune dysregulation. Because PLZF integrates signaling pathways that regulate differentiation and self-renewal, it continues to be an important target for studies of developmental biology, immunology, and cancer. Although officially designated ZBTB16, the historical name PLZF remains the predominant terminology throughout much of the biomedical literature.

An PLZF Antibody is a valuable tool for investigating nuclear localization, transcriptional repression, and epigenetic regulation in normal and diseased tissues. Researchers frequently use Promyelocytic Leukemia Zinc Finger Protein Antibody reagents to study stem cell biology, immune cell differentiation, chromatin remodeling, and transcriptional networks involved in development and cancer.

Learn more about the official gene nomenclature, biological functions, and additional validation data by visiting our ZBTB16 Antibody / Zinc Finger and BTB Domain Containing 16 Antibody page.

Application Notes

Optimal dilution of the PLZF Antibody / Promyelocytic Leukemia Zinc Finger Protein Antibody should be determined by the researcher.

Immunogen

Amino acids M1-E165 from the human protein were used as the immunogen for the PLZF antibody.

Storage

After reconstitution, the PLZF antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

PLZF Antibody, Promyelocytic Leukemia Zinc Finger Protein Antibody, ZBTB16 Antibody, Zinc Finger and BTB Domain Containing 16 Antibody, ZNF145 Antibody

References (1)

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