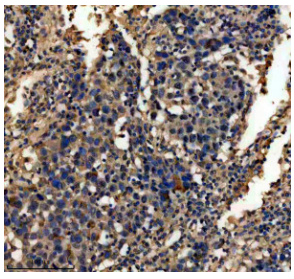
PML Monoclonal Antibody ABAF-16 / TRIM19 Rabbit Monoclonal Antibody [clone ABAF-16] (FY13696)

Catalog No.	Formulation	Size
FY13696	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol	100 ul

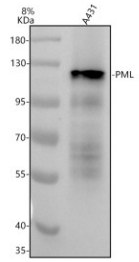
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ABAF-16
Purity	Affinity purified
UniProt	P29590
Applications	Western blot: 1:500 Immunohistochemistry (FFPE): 1:50
Limitations	This PML Monoclonal Antibody ABAF-16 / TRIM19 Rabbit Monoclonal Antibody is available for research use only.



PML Monoclonal Antibody ABAF-16 IHC Staining of Human Lung Cancer. Immunohistochemical analysis of FFPE human lung cancer tissue using TRIM19 Rabbit Monoclonal Antibody clone ABAF-16 at a 1:50 dilution. Brown DAB immunoreactivity is observed predominantly in the cytoplasm of tumor cells, with some nuclear staining. Heat-induced epitope retrieval was performed using EDTA buffer at pH 8. Tissue sections were blocked with 10% goat serum before overnight incubation with primary antibody at 4oC.



PML Monoclonal Antibody ABAF-16 WB Analysis of Human A431 Cell Lysate. Western blot analysis of human A431 whole-cell lysate using TRIM19 Rabbit Monoclonal Antibody clone ABAF-16. A prominent immunoreactive band is detected at approximately 120 kDa, above the calculated molecular weight of 97.6 kDa. PML has multiple alternatively spliced isoforms and undergoes post-translational modifications, including SUMOylation, that can influence electrophoretic migration. The detected band has not been assigned to a specific molecular form.

Description

PML Monoclonal Antibody ABAF-16 / TRIM19 Rabbit Monoclonal Antibody targets promyelocytic leukemia protein (PML), also known as TRIM19, a tumor suppressor involved in nuclear organization, transcriptional regulation, and cellular stress responses. PML belongs to the tripartite motif family of proteins and is a principal structural component of PML nuclear bodies, specialized nuclear compartments that recruit regulatory proteins involved in apoptosis, senescence, DNA damage responses, and antiviral defense. Its conserved RBCC motif contains a RING finger domain, two B-box domains, and a coiled-coil region that mediate protein interactions and contribute to nuclear body assembly.

PML nuclear bodies function as dynamic regulatory platforms whose organization depends on protein oligomerization and post-translational modifications. SUMOylation is particularly important for recruiting proteins containing SUMO-interacting motifs and maintaining nuclear body architecture. PML also undergoes phosphorylation and ubiquitination, which influence its stability, localization, and interactions with signaling proteins. Alternative splicing produces multiple PML isoforms with distinct C-terminal sequences and biological properties. Although most PML isoforms are associated with nuclear structures, certain variants can also localize to the cytoplasm and participate in additional signaling processes.

PML contributes to tumor suppression through regulation of cell cycle progression, apoptosis, and cellular senescence. It interacts with proteins involved in the p53 pathway and helps coordinate responses to oncogenic stress and DNA damage. PML nuclear bodies also participate in chromatin regulation and transcriptional control. Interferon signaling can increase PML expression, supporting its involvement in antiviral defense and immune responses. Changes in nuclear body number, composition, and organization occur in response to oxidative stress, infection, and other cellular challenges, reflecting the protein's role in maintaining cellular homeostasis.

PML is closely associated with acute promyelocytic leukemia, where a chromosomal translocation produces the PML-RARA fusion protein. This oncogenic fusion disrupts normal PML nuclear body organization and interferes with retinoic acid-dependent transcriptional programs required for myeloid differentiation. Treatment with all-trans retinoic acid and arsenic trioxide promotes degradation of the fusion protein and restoration of normal nuclear structures. Beyond leukemia, altered PML expression and function have been investigated in solid tumors, metabolic regulation, and aging-associated processes. PML Monoclonal Antibody ABAF-16 supports research into TRIM19 expression, nuclear body biology, and the signaling mechanisms connecting PML dysfunction with cancer and cellular stress responses.

For complementary studies of PML expression and nuclear body regulation, our PML Antibody R32552 provides additional validation in human cell lysates and cancer tissues.

Application Notes

Optimal dilution of the PML Monoclonal Antibody ABAF-16 / TRIM19 Rabbit Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human promyelocytic leukemia protein was used as the immunogen for the PML Monoclonal Antibody ABAF-16.

Storage

The PML Monoclonal Antibody ABAF-16 can be stored at -20oC.

Alternate Names

TRIM19 antibody, Promyelocytic leukemia protein antibody, Protein PML antibody, Tripartite motif-containing protein 19 antibody, Promyelocytic leukemia nuclear body protein antibody, PML nuclear body protein antibody, PML tumor suppressor antibody, RING finger protein PML antibody, Promyelocytic leukemia zinc finger protein antibody, PML protein

antibody, PML-NB protein antibody, Tripartite motif protein 19 antibody

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