



PML Polyclonal Antibody

Catalog No	YP-Ab-01943
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	PML
Immunogen	The antiserum was produced against synthesized peptide derived from human PML. AA range:11-60
Specificity	PML Polyclonal Antibody detects endogenous levels of PML protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	E3 SUMO-protein ligase PML;EC:2.3.2.-;Protein PML;RING-type E3 SUMO transferase PML;RNF71;PML;MYL;TRIM19;Promyelocytic leukemia protein; RING finger protein 71;Tripartite motif-containing protein 19
Observed Band	98kD
Calculated Molecular Weight	98kD
Cell Pathway	Nucleus. Nucleus, nucleoplasm. Cytoplasm . Nucleus, PML body . Nucleus, nucleolus. Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Isoform PML-1 can shuttle between the nucleus and cytoplasm. Isoform PML-2, isoform PML-3, isoform PML-4, isoform PML-5 and isoform PML-6 are nuclear isoforms whereas isoform PML-7 and isoform PML-14 lacking the nuclear localization signal are cytoplasmic isoforms. Detected in the nucleolus after DNA damage. Acetylation at Lys-487 is essential for its nuclear localization. Within the nucleus, most of PML is expressed in the diffuse nuclear fraction of the nucleoplasm and only a small fraction is found in the matrix-associated nuclear bodies (PML-NBs). The t
Tissue Specificity	Brain,Epithelium,Kidney,Spleen,



Function

alternative products:Additional isoforms seem to exist,disease:A chromosomal aberration involving PML may be a cause of acute promyelocytic leukemia (APL) . Translocation t(15;17)(q21;q21) with RARA. The PML breakpoints (type A and type B) lie on either side of an alternatively spliced exon.,function:Probable transcription factor. May play an important role in recruitment of ELF4 into PML nuclear bodies.,PTM:Sumoylated on all three sites is required for nuclear body formation. Sumoylation on Lys-160 is a prerequisite for sumoylation on Lys-65. The PML-RARA fusion protein is not sumoylated.,PTM:Ubiquitinated; mediated by SIAH1 or SIAH2 and leading to its subsequent proteasomal degradation.,similarity:Contains 1 RING-type zinc finger.,similarity:Contains 2 B box-type zinc fingers.,subcellular location:Sumoylated forms localize to the PML nuclear bodies. The B1 box and the RING finger are al

Background

The protein encoded by this gene is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This phosphoprotein localizes to nuclear bodies where it functions as a transcription factor and tumor suppressor. Its expression is cell-cycle related and it regulates the p53 response to oncogenic signals. The gene is often involved in the translocation with the retinoic acid receptor alpha gene associated with acute promyelocytic leukemia (APL). Extensive alternative splicing of this gene results in several variations of the protein's central and C-terminal regions; all variants encode the same N-terminus. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008],

matters needing attention

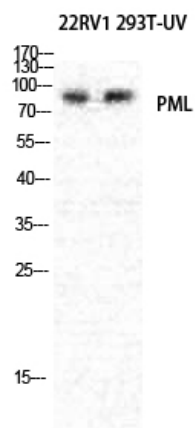
Avoid repeated freezing and thawing!

Usage suggestions

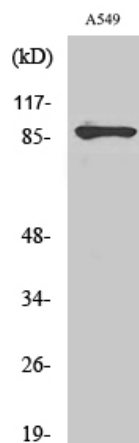
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



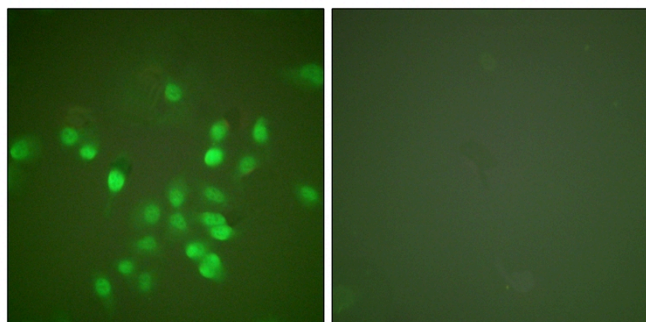
Products Images



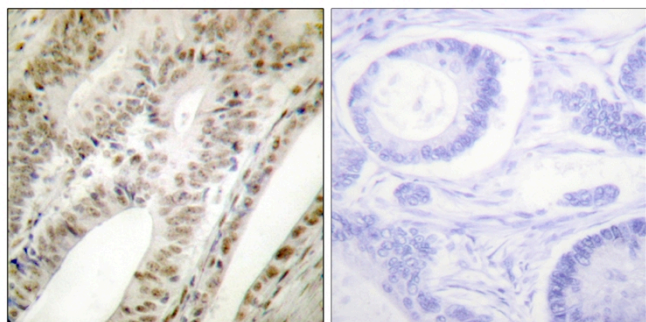
Western Blot analysis of various cells using PML Polyclonal Antibody diluted at 1:1000



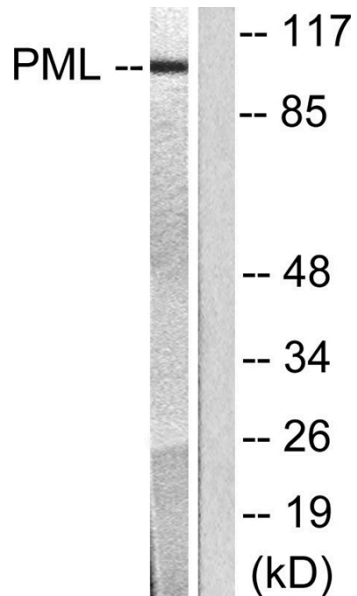
Western Blot analysis of A549 cells using PML Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of A549 cells, using PML Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human tonsil tissue, using PML Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from A549 cells, using PML Antibody. The lane on the right is blocked with the synthesized peptide.