

PML Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant PML. Catalog # AT3354a

Product Information

Application	WB, IF, E
Primary Accession	<u>P29590</u>
Other Accession	<u>BC000080</u>
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1D12
Calculated MW	97551

Additional Information

Gene ID	5371
Other Names	Protein PML, Promyelocytic leukemia protein, RING finger protein 71, Tripartite motif-containing protein 19, PML, MYL, PP8675, RNF71, TRIM19
Target/Specificity	PML (AAH00080, 411 a.a. ~ 510 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PML Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

References

PML down-regulation in soft tissue sarcomas. Vincenzi B, et al. J Cell Physiol, 2010 Sep. PMID 20578240. Analysis of t(15;17) chromosomal breakpoint sequences in therapy-related versus de novo acute promyelocytic leukemia: association of DNA breaks with specific DNA motifs at PML and RARA loci. Hasan SK, et al. Genes Chromosomes Cancer, 2010 Aug. PMID 20544846. Two-step colocalization of MORC3 with PML nuclear bodies. Mimura Y, et al. J Cell Sci, 2010 Jun 15. PMID 20501696. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. Dysregulation of promyelocytic leukemia (PML) protein expression in preeclamptic placentae. Leavenworth JD, et al. Reprod Sci, 2010 Apr. PMID 20228380.

Images



Immunofluorescence of monoclonal antibody to PML on HeLa cell. [antibody concentration 10 ug/ml]





Recombinant ProteinConcentration(ng/ml)

Detection limit for recombinant GST tagged PML is approximately 0.3ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between TP53 and PML HeLa cells were stained with anti-TP53 rabbit purified polyclonal 1:1200 and anti-PML mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.