

#### Total PML Cell-Based Colorimetric ELISA Kit

Catalog No: KA3361C

Reactivity: Human

**Applications:** ELISA

Gene Name: PML

Human Gene Id: 5371

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

**Storage Stability:** 2-8°C/6 months

P29590

Q60953

**Detection Method:** Colorimetric

### **Background:**

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)(g21;g21) 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 also required for this nuclear localization. Isoforms lacking a nuclear localization signal are cytoplasmic., subunit: Interacts with SIRT1, TOPBP1, TRIM27 and TRIM69. Interacts with the C-terminus of ELF4. Interacts with Lassa virus Z protein and rabies virus phosphoprotein.,

#### **Function:**

protein import into nucleus, translocation, cell cycle checkpoint, DNA damage checkpoint, regulation of cell growth,response to hypoxia, positive regulation of defense response to virus by host, immune system development,regulation of immune effector process, regulation of response to biotic stimulus, DNA metabolic process, DNA repair,transcription, regulation of translation, protein complex assembly, protein amino acid phosphorylation, protein targeting, protein



import into nucleus, phosphorus metabolic process, phosphate metabolic process, intracellular protein transport, nucleocytoplasmic transport, apoptosis, induction of apoptosis, activation of caspase activity,response to DNA damage stimulus, DNA damage response, signal transduction by p53 class mediator resulting in cell cycle arrest, response to oxidative stress, nucleus organization, cell cycle, cell cycle arrest, mitotic cell

# Subcellular Location:

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-14 lacking the 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

**Sort**: 23128

No4:

Modifications: Unmodified

## **Products Images**

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