

Anti-PML Protein Antibody [PSH02-89]

HA721877



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Cell, FC
Molecular Wt:	Predicted band size: 98 kDa
Clone number:	PSH02-89

Description: Promyelocytic leukemia protein (PML) (also known as MYL, RNF71, PP8675 or TRIM19) is the protein product of the PML gene. PML protein is a tumor suppressor protein required for the assembly of a number of nuclear structures, called PML-nuclear bodies, which form amongst the chromatin of the cell nucleus. These nuclear bodies are present in mammalian nuclei, at about 1 to 30 per cell nucleus. PML-NBs are known to have a number of regulatory cellular functions, including involvement in programmed cell death, genome stability, antiviral effects and controlling cell division. PML mutation or loss, and the subsequent dysregulation of these processes, has been implicated in a variety of cancers.

Immunogen: Recombinant protein within human PML Protein aa 1-600 / 882.

Positive control: HeLa cell lysate, HEK-293 cell lysate, K-562 cell lysate, A549 cell lysate, MDA-MB-231 cell lysate, A431 cell lysate, human brain tissue, human breast carcinoma tissue, human breast tissue, human placenta tissue, human testis tissue, MDA-MB-231, A431.

Subcellular location: Nucleus, Cytoplasm, PML body, nucleolus, Endoplasmic reticulum membrane, Early endosome membrane.

Database links: SwissProt: P29590 Human

Recommended Dilutions:

WB	1:2,000
IHC-P	1:1,000
IF-Cell	1:100
FC	1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

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Service mail:support@huabio.cn

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Images

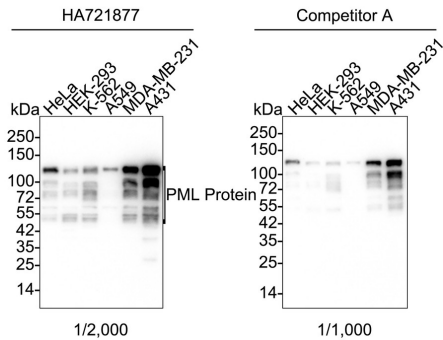


Fig1: Western blot analysis of PML Protein on different lysates with Rabbit anti-PML Protein antibody (HA721877) at 1/2,000 dilution and competitor's antibody at 1/1,000 dilution.

Lane 1: HeLa cell lysate (15 µg/Lane)
 Lane 2: HEK-293 cell lysate (15 µg/Lane)
 Lane 3: K-562 cell lysate (15 µg/Lane)
 Lane 4: A549 cell lysate (15 µg/Lane)
 Lane 5: MDA-MB-231 cell lysate (15 µg/Lane)
 Lane 6: A431 cell lysate (15 µg/Lane)

Predicted band size: 98 kDa
 Observed band size: 50-130 kDa

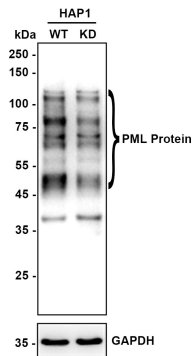
Exposure time: 1 minute 59 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA721877) at 1/2,000 dilution and competitor's antibody at 1/1,000 dilution were used in 5% NFDN/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of PML Protein on different lysates with Rabbit anti-PML Protein antibody (HA721877) at 1/5,000 dilution.

Lane 1: HAP1-parental cell lysate
 Lane 2: HAP1-PML Protein KD cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 98 kDa
 Observed band size: 50-130 kDa

Exposure time: 40 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA721877) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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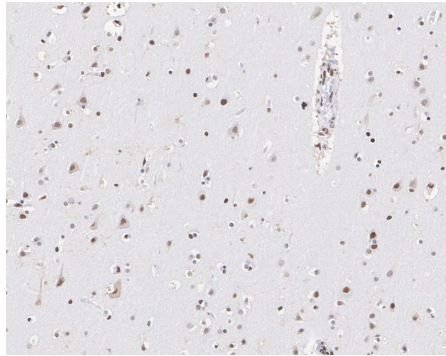


Fig3: Immunohistochemical analysis of paraffin-embedded human brain tissue with Rabbit anti-PML Protein antibody (HA721877) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721877) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

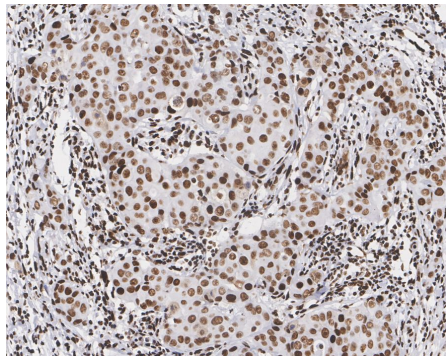


Fig4: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue with Rabbit anti-PML Protein antibody (HA721877) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721877) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

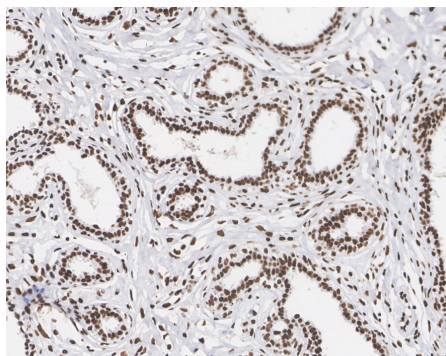


Fig5: Immunohistochemical analysis of paraffin-embedded human breast tissue with Rabbit anti-PML Protein antibody (HA721877) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721877) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

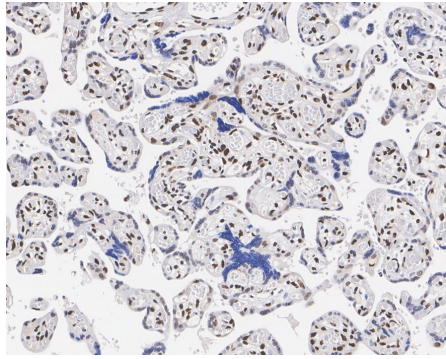


Fig6: Immunohistochemical analysis of paraffin-embedded human placenta tissue with Rabbit anti-PML Protein antibody (HA721877) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721877) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

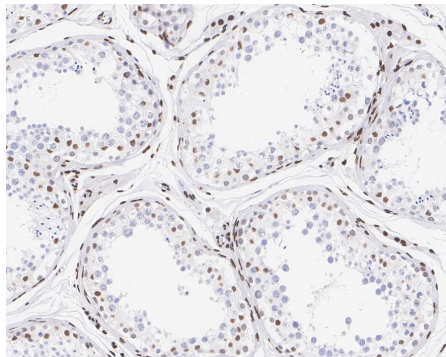
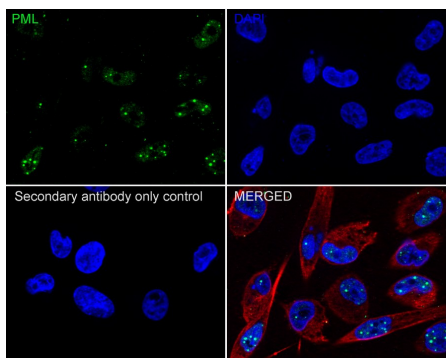


Fig7: Immunohistochemical analysis of paraffin-embedded human testis tissue with Rabbit anti-PML Protein antibody (HA721877) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721877) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig8: Immunocytochemistry analysis of MDA-MB-231 cells labeling PML Protein with Rabbit anti-PML Protein antibody (HA721877) at 1/100 dilution.



Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-PML Protein antibody (HA721877) at 1/100 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

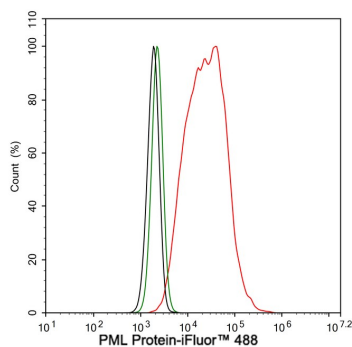


Fig9: Flow cytometric analysis of A431 cells labeling PML Protein.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA721877, 1 μ g/mL) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4 $^{\circ}$ C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4 $^{\circ}$ C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Li Y et al. PML nuclear body biogenesis and oligomerization-driven leukemogenesis. *Blood Sci.* 2020 Jan
2. Tan Y et al. A PML/RAR α direct target atlas redefines transcriptional deregulation in acute promyelocytic leukemia. *Blood.* 2021 Mar

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