Anti-PARP1 Antibody

ER1802-67



Product Type: Rabbit polyclonal IgG, primary antibodies

Species reactivity: Human, Mouse
Applications: WB, IF-Cell, FC

Molecular Wt: Predicted band size: 113 kDa

Description: Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-

ribosyl)ation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks. Mediates the poly(ADP-ribosyl)ation of APLF and CHFR. Positively regulates the transcription of MTUS1 and negatively regulates the transcription of MTUS2/TIP150. With EEF1A1 and TXK, forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production. Required for PARP9 and DTX3L recruitment to DNA damage sites. PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1

to DNA damage sites.

Immunogen: Synthetic peptide within PARP1 aa 190-270.

Positive control: Daudi, 293, A431, SH-SY5Y, K562.

Subcellular location: Nucleus, nucleolus, Cytoplasm, cytosol.

Database links: SwissProt: P09874 Human

Recommended Dilutions:

WB 1:500 IF-Cell 1:50-1:100 FC 1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4° C. Store at $+4^{\circ}$ C short term (1-2 weeks). It is recommended to aliquot into

single-use upon delivery. Store at -20 ℃ long term.

Purity: Immunogen affinity purified.

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Images

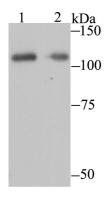


Fig1: Western blot analysis of PARP1 on Daudi and 293 cell lysates using anti- PARP1 antibody at 1/500 dilution.

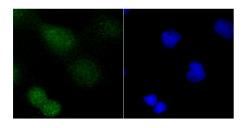


Fig2: ICC staining PARP1 in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

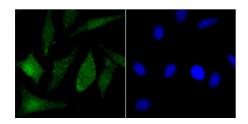


Fig3: ICC staining PARP1 in SH-SY5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

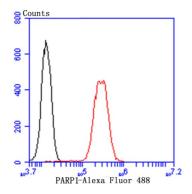


Fig4: Flow cytometric analysis of K562 cells with PARP1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

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

Background References

- 1. Maruyama T et al. Txk, a member of the non-receptor tyrosine kinase of the Tec family, forms a complex with poly(ADP-ribose) polymerase 1 and elongation factor 1alpha and regulates interferon-gamma gene transcription in Th1 cells. Clin Exp Immunol 147:164-175 (2007).
- 2. Kanno S et al. A novel human AP endonuclease with conserved zinc-finger-like motifs involved in DNA strand break responses. EMBO J 26:2094-2103 (2007).