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Parp12 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6298b

Product Information

Application	WB, E
Primary Accession	Q8BZ20
Other Accession	NP_766481
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	79917
Antigen Region	454-483

Additional Information

Gene ID	243771
Other Names	Poly [ADP-ribose] polymerase 12, PARP-12, ADP-ribosyltransferase diphtheria toxin-like 12, ARTD12, Zinc finger CCCH domain-containing protein 1, Parp12, Zc3hdc1
Target/Specificity	This Parp12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 454-483 amino acids from the C-terminal region of mouse Parp12.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Parp12 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Parp12 {ECO:0000312|MGI:MGI:2143990}
Synonyms	Zc3hdc1
Function	Mono-ADP-ribosyltransferase that mediates mono-ADP- ribosylation of

target proteins. Displays anti-alphavirus activity during IFN-gamma immune activation by directly ADP-ribosylating the alphaviral non-structural proteins nsP3 and nsP4. Acts as a component of the PRKD1-driven regulatory cascade that selectively controls a major branch of the basolateral transport pathway by catalyzing the MARylation of GOLGA1. Acts also as a key regulator of mitochondrial function, protein translation, and inflammation (PubMed:35916471). Inhibits PINK1/Parkin-dependent mitophagy and promotes cartilage degeneration by inhibiting the ubiquitination and SUMOylation of MFN1/2 by upregulating ISG15 and ISGylation.

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q9H0J9}. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:Q9H0J9} Cytoplasm, Stress granule {ECO:0000250|UniProtKB:Q9H0J9} Note=Translocates from the Golgi complex to stress granules upon stress conditions. {ECO:0000250|UniProtKB:Q9H0J9}

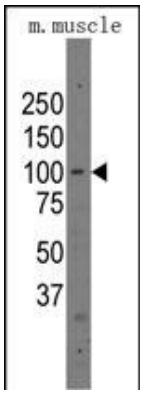
Background

Poly(ADP-ribosyl)ation is an immediate DNA-damage-dependent post-translational modification of histones and other nuclear proteins that contributes to the survival of injured proliferating cells. Poly(ADP-ribose) polymerases (PARPs) now constitute a large family of 18 proteins, encoded by different genes and displaying a conserved catalytic domain in which PARP-1 (113 kDa), the founding member, and PARP-2 (62 kDa) are so far the sole enzymes whose catalytic activity has been shown to be immediately stimulated by DNA strand breaks. A large repertoire of sequences encoding novel PARPs now extends considerably the field of poly(ADP-ribosyl)ation reactions to various aspects of the cell biology including cell proliferation and cell death. Some of these new members interact with each other, share common partners and common subcellular localizations suggesting possible fine tuning in the regulation of this post-translational modification of proteins.

References

Bailey,P.J., Exp. Cell Res. 312 (16), 3108-3119 (2006)
Katoh,M., Int. J. Oncol. 23 (2), 541-547 (2003)

Images



Western blot analysis of anti-Parp12 Pab (RB14194) in mouse muscle tissue lysates (35ug/lane). Parp12(arrow) was detected using the purified Pab.

Citations

- Scarless fetal mouse wound healing may initiate apoptosis through caspase 7 and cleavage of PARP.