

ARG41050 anti-PARG antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PARG
Tested Reactivity	Hu
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PARG
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 777-976 of Human PARG (NP_003622.2).
Conjugation	Un-conjugated
Alternate Names	PARG99

Application Instructions

Application table	Application	Dilution
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	U-251MG	
Observed Size	111 kDa	

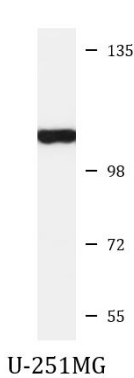
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PARG
Gene Full Name	poly(ADP-ribose) glycohydrolase
Background	Poly(ADP-ribose) glycohydrolase (PARG) is the major enzyme responsible for the catabolism of poly(ADP-ribose), a reversible covalent-modifier of chromosomal proteins. The protein is found in many tissues and may be subject to proteolysis generating smaller, active products. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2015]
Function	Poly(ADP-ribose) glycohydrolase that degrades poly(ADP-ribose) by hydrolyzing the ribose-ribose bonds present in poly(ADP-ribose) (PubMed:21892188, PubMed:23102699, PubMed:23474714). PARG acts both as an endo- and exoglycosidase, releasing poly(ADP-ribose) of different length as well as ADP-ribose monomers (PubMed:23102699, PubMed:23481255). It is however unable to cleave the ester bond between the terminal ADP-ribose and ADP-ribosylated residues, leaving proteins that are mono-ADP-ribosylated (PubMed:21892188, PubMed:23474714). Poly(ADP-ribose) is synthesized after DNA damage is only present transiently and is rapidly degraded by PARG (PubMed:23102699). Required to prevent detrimental accumulation of poly(ADP-ribose) upon prolonged replicative stress, while it is not required for recovery from transient replicative stress (PubMed:24906880). Required for retinoid acid-dependent gene transactivation, probably by removing poly(ADP-ribose) from histone demethylase KDM4D, allowing chromatin derepression at RAR-dependent gene promoters (PubMed:23102699). Involved in the synthesis of ATP in the nucleus, together with PARP1, NMNAT1 and NUDT5 (PubMed:27257257). Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming (PubMed:27257257). [UniProt]
Calculated Mw	111 kDa
Cellular Localization	Isoform 1: Nucleus. Note=Colocalizes with PCNA at replication foci. Relocalizes to the cytoplasm in response to DNA damage. Isoform 2: Cytoplasm. Note=Translocates to the nucleus in response to DNA damage. Isoform 3: Cytoplasm. Isoform 4: Cytoplasm. Mitochondrion. Isoform 5: Mitochondrion matrix. [UniProt]

Images



ARG41050 anti-PARG antibody WB image

Western blot: 25 µg of U-251MG cell lysate stained with ARG41050 anti-PARG antibody at 1:1000 dilution through one-step method.