



Cleaved-PARP-1 (G215) Polyclonal Antibody

Catalog No	YP-Ab-00027
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	PARP1
Protein Name	Poly [ADP-ribose] polymerase 1
Immunogen	The antiserum was produced against synthesized peptide derived from human PARP. AA range:196-245
Specificity	Cleaved-PARP-1 (G215) Polyclonal Antibody detects endogenous levels of fragment of activated PARP-1 protein resulting from cleavage adjacent to G215.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PARP1; ADPRT; PPOL; Poly [ADP-ribose] polymerase 1; PARP-1; ADP-ribosyltransferase diphtheria toxin-like 1; ARTD1; NAD(+) ADP-ribosyltransferase 1; ADPRT 1; Poly[ADP-ribose] synthase 1
Observed Band	89kD
Cell Pathway	Nucleus . Nucleus, nucleolus . Chromosome . Localizes to sites of DNA damage. .
Tissue Specificity	Brain,Colon carcinoma,Fibroblast,Lung,Ovarian carcinoma,Skin,
Function	catalytic activity:NAD(+) + (ADP-D-ribose)(n)-acceptor = nicotinamide + (ADP-D-ribose)(n+1)-acceptor.,function:Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribose)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.,miscellaneous:The ADP-D-ribose group of NAD(+) is transferred to an acceptor carboxyl group on a histone or the enzyme itself, and further ADP-ribose groups are transferred to the 2'-position of the terminal adenosine moiety, building up a polymer with an average chain length of 20-30 units.,PTM:Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR.,PTM:Poly-ADP-ribosylated by PARP2.,similarity:Contains 1 BRCT



Background

This gene encodes a chromatin-associated enzyme, poly(ADP-ribose)transferase, which modifies various nuclear proteins by poly(ADP-ribose)ation. The modification is dependent on DNA and is involved in the regulation of various important cellular processes such as differentiation, proliferation, and tumor transformation and also in the regulation of the molecular events involved in the recovery of cell from DNA damage. In addition, this enzyme may be the site of mutation in Fanconi anemia, and may participate in the pathophysiology of type I diabetes. [provided by RefSeq, Jul 2008],

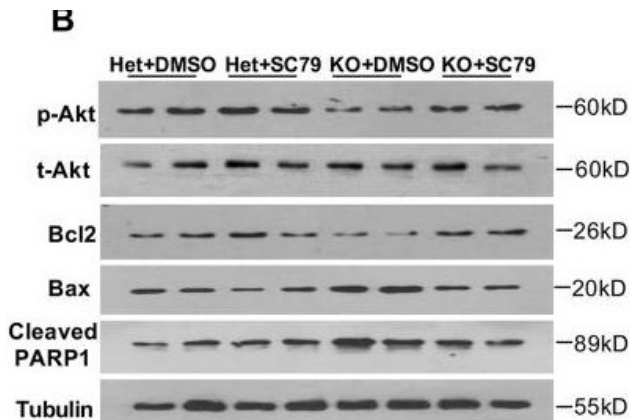
matters needing attention

Avoid repeated freezing and thawing!

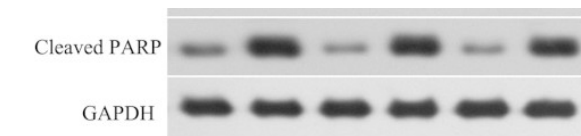
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

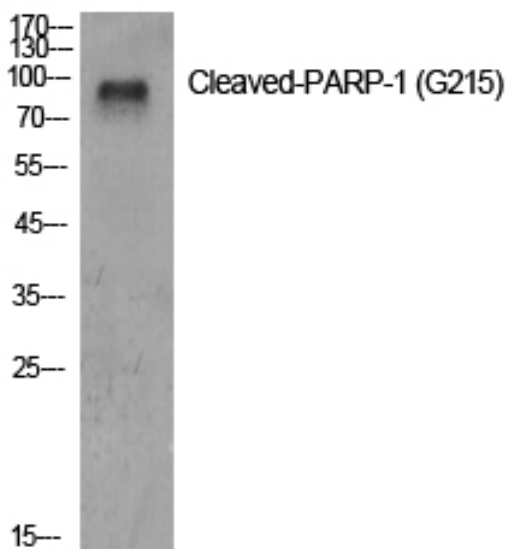
Products Images



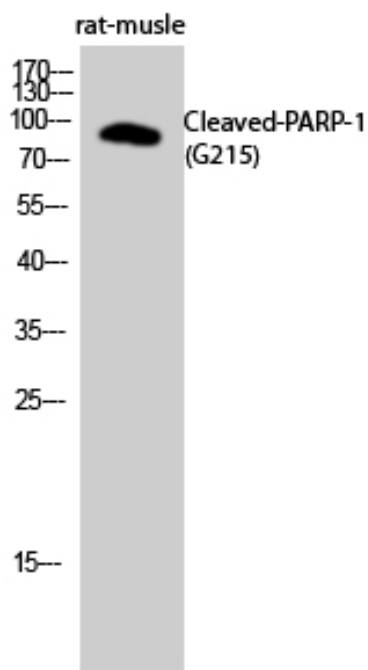
Wang, Bin, et al. "Loss of Tctn3 causes neuronal apoptosis and neural tube defects in mice." *Cell death & disease* 9.5 (2018): 520.



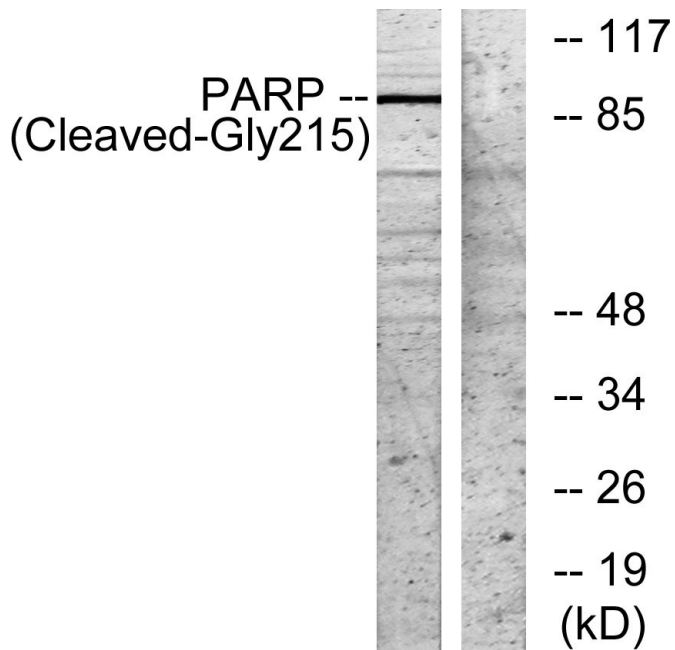
Mao, Dongwei, et al. "RNAi-mediated knockdown of the CLN3 gene inhibits proliferation and promotes apoptosis in drug-resistant ovarian cancer cells." *Molecular medicine reports* 12.5 (2015): 6635-6641.



Western Blot analysis of various cells using Cleaved-PARP-1 (G215) Polyclonal Antibody diluted at 1:500



Western Blot analysis of rat-muscle cells using Cleaved-PARP-1 (G215) Polyclonal Antibody diluted at 1:500



Western blot analysis of lysates from NIH/3T3 cells, treated with etoposide 25uM 1h, using PARP (Cleaved-Gly215) Antibody. The lane on the right is blocked with the synthesized peptide.