10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PARP1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PARP1.
Catalog # AT3183a

Product Information

Application	WB, IF, E
Primary Accession	P09874
Other Accession	BC037545
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3G4
Calculated MW	113084

Additional Information

Gene ID	142
Other Names	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, PARP1, ADPRT, PPOL
Target/Specificity	PARP1 (AAH37545, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PARP1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

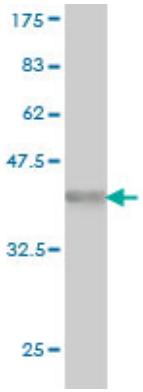
Background

This gene encodes a chromatin-associated enzyme, poly(ADP-ribosyl)transferase, which modifies various nuclear proteins by poly(ADP-ribosyl)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.

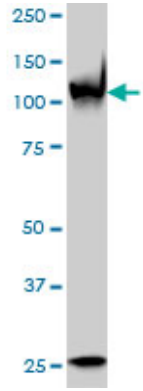
References

1.The ADP-ribosyltransferase PARP10/ARTD10 interacts with Proliferating Cell Nuclear Antigen (PCNA) and is required for DNA damage tolerance.Nicolae CM, Aho ER, Vlahos AH, Choe KN, De S, Karras GI, Moldovan GLJ Biol Chem. 2014 May 9;289(19):13627-37. doi: 10.1074/jbc.M114.556340. Epub 2014 Apr 2.2.Regulation of FANCD2 by the mTOR pathway contributes to the resistance of cancer cells to DNA double strand breaks.Shen C, Oswald D, Phelps D, Cam H, Pelloski CE, Pang Q, Houghton PJCancer Res. 2013 May 21.3.DDB2 promotes chromatin decondensation at UV-induced DNA damage.Luijsterburg MS, Lindh M, Acs K, Vrouwe MG, Pines A, van Attikum H, Mullenders LH, Dantuma NP.J Cell Biol. 2012 Apr 9. [Epub ahead of print]4.PARP1 promotes nucleotide excision repair through DDB2 stabilization and recruitment of ALC1.Pines A, Vrouwe MG, Marteijn JA, Typas D, Luijsterburg MS, Cansoy M, Hensbergen P, Deelder A, de Groot A, Matsumoto S, Sugasawa K, Thoma N, Vermeulen W, Vrieling H, Mullenders L.J Cell Biol. 2012 Oct 8. [Epub ahead of print]5.The Metastasis Efficiency Modifier Ribosomal RNA Processing 1 Homolog B (RRP1B) Is a Chromatin-associated Factor.Crawford NP, Yang H, Mattaini KR, Hunter KW.J Biol Chem. 2009 Oct 16;284(42):28660-73. Epub 2009 Aug 26.

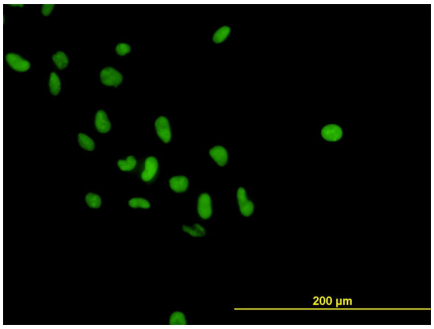
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .

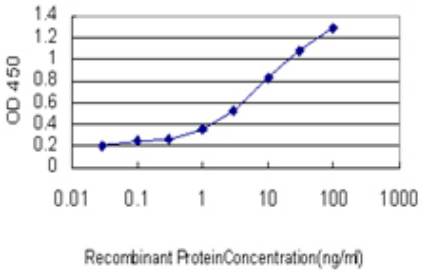


PARP1 monoclonal antibody (M01), clone 3G4 Western Blot analysis of PARP1 expression in Hela S3 NE ((Cat # AT3183a)



Immunofluorescence of monoclonal antibody to PARP1 on HeLa cell. [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged PARP1 is approximately 0.1ng/ml as a capture antibody.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.