

## **PARP1 Antibody (monoclonal) (M01)**

Mouse monoclonal antibody raised against a partial recombinant PARP1.

Catalog # AT3183a

### **Specification**

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#### **PARP1 Antibody (monoclonal) (M01) - Product Information**

Application	IF, WB, E
Primary Accession	<a href="#">P09874</a>
Other Accession	<a href="#">BC037545</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	113084

#### **PARP1 Antibody (monoclonal) (M01) - 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

##### **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.

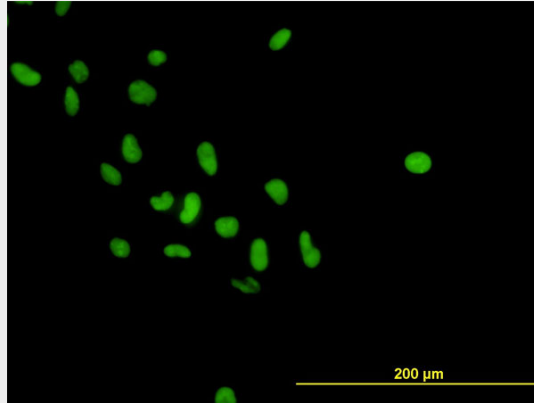
#### **PARP1 Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

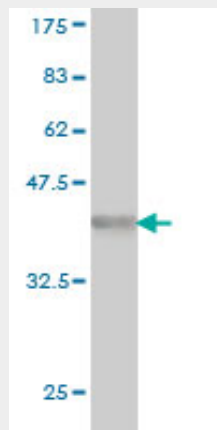
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

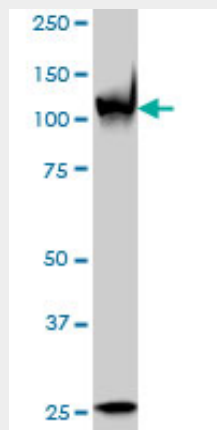
### PARP1 Antibody (monoclonal) (M01) - Images



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

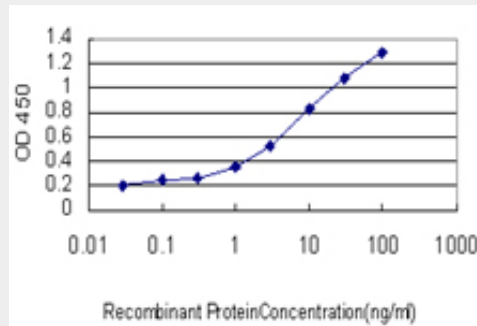


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



PARP1 monoclonal antibody (M01), clone 3G4 Western Blot analysis of PARP1 expression in HeLa

S3 NE ( (Cat # AT3183a )



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

**PARP1 Antibody (monoclonal) (M01) - 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.

**PARP1 Antibody (monoclonal) (M01) - 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 GL. *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 PJ. *Cancer Res.* 2013 May 21;73(19):5943-52. doi: 10.1158/0008-5472.CCR122923.
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, Marteiijn 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.