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Datasheet for ABIN7320158
PARP1 Protein (His tag)

1 Image

Overview

Quantity:	100 µg
Target:	PARP1
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This PARP1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse PARP-1 Protein (His Tag)(Active)
Sequence:	Met 1-Trp 1014
Characteristics:	A DNA sequence encoding the mouse PARP1 (NP_031441.2) (Met 1-Trp 1014) was fused with a polyhistidine tag at the N-terminus.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	1. Measured by its binding ability in a functional ELISA. 2. Immobilized mouse PARP1 at 10 µg/mL (100 µl/well) can bind biotinylated human HSP70, The EC50 of biotinylated human HSP70 is 0.021 µg/mL.

Target Details

Target:	PARP1
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Target Details

Alternative Name: PARP-1 ([PARP1 Products](#))

Background: Poly (ADP-ribose) polymerase 1 (PARP1), also known as NAD(+) ADP-ribosyltransferase 1 (ADPRT), is a chromatin-associated enzyme which modifies various nuclear proteins by poly(ADP-ribosylation). The ADP-D-ribosyl group of NAD⁺ is transferred to an acceptor carboxyl group on a histone or the enzyme itself, and further ADP-ribosyl 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. The poly(ADP-ribosylation) modification is critical for a wide range of processes, including DNA repair, regulation of chromosome structure, transcriptional regulation, mitosis and apoptosis. PARP1 is demonstrated to mediate the poly(ADP-ribose) ation of APLF (aprataxin PNK-like factor) and CHFR (checkpoint protein with FHA and RING domains), two representative proteins involved in the DNA damage response and checkpoint regulation. Further, It has been suggested that DNA-dependent protein kinase (DNA-PK), another component of DNA repair, suppresses PARP activity, probably through direct binding and/or sequestration of DNA-ends which serve as an important stimulator for both enzymes. PARP1 inhibitors is thus proposed as a targeted cancer therapy for recombination deficient cancers, such as BRCA2 tumors. [Immune Checkpoint Immunotherapy Cancer Immunotherapy Targeted Therapy](#)

Synonym: 5830444G22Rik;Adprp;Adprt1;AI893648;ARTD1;C80510;PARP;parp-1;PPOL;sPARP-1

Molecular Weight: 115 kDa

NCBI Accession: [NP_031441](#)

Pathways: [Apoptosis](#), [Caspase Cascade in Apoptosis](#), [DNA Damage Repair](#), [Production of Molecular Mediator of Immune Response](#), [Maintenance of Protein Location](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 10 % glycerol, 0.1 mM TCEP

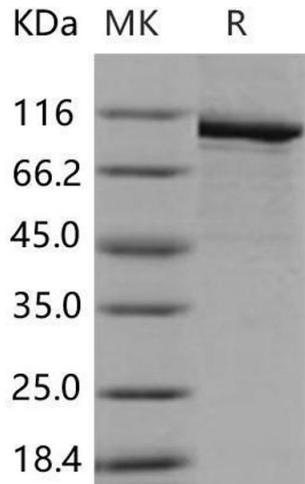
Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Handling

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.