

Human PARP1 Recombinant Protein

PX-P1137-10

DESCRIPTION

Poly (ADP-ribose) Polymerase 1 (PARP1) also known as NAD(+) ADP-ribosyltransferase 1(ADPRT), is a nuclear enzyme that synthesizes ADP-ribose polymers from NAD⁺, specifically binds Zn²⁺ and DNA, and recognizes single-strand breaks in DNA. 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. PARP1 has been used in a research study to assess racial and tissue-specific cancer risk associated with polymorphism in the PARP1 gene. It has also been used to investigate inhibitors of PARP-1 for potential cancer treatments.

OVERVIEW

SIZE	10 ug
ORIGIN SPECIES	Human
FRAGMENT	Partial (Δ Nter)
PROTEIN DELIVERED WITH TAG	Yes
MOLECULAR WEIGHT WITH TAG IF ANY	90,90 kDa
DELIVERY CONDITION	Dry Ice

PRODUCT INFORMATION

EXPRESSION SYSTEM	Prokaryotic expression
HOST	E.coli
PURITY	0,6
PROTEIN ACCESSION	AAB59447.1
FORM	liquid
BUFFER	PBS, imidazole 300mM
STABILITY & STORAGE	4°C for short term (1 week), -20°C or -80°C for long term (avoid freezing/thawing cycles; addition of 20-40% glycerol improves cryoprotection)

MORE INFO

GENE ID	142
SWISSPROTID	P09874
UNIPROT ID	P09874
UNIPROT LINK	http://www.uniprot.org/uniprot/P09874
NCBI GENE ALIASES	PPOL, ADPRT, ARTD1, PARP-1, ADPRT 1, PARP, ADPRT1, pADPRT-1
SYNONYMS	PARP1, poly(ADP-ribose) synthetase, PARP-1, ADP-ribosyltransferase diphtheria toxin-like 1, ARTD1, NAD(+) ADP-ribosyltransferase 1, ADPRT 1, Poly[ADP-ribose] synthase 1, ADPRT, PPOL

PROTEIN SEQUENCE

MAHNHRHKHKLDDDDKGVDEVAKKKSKKEKDKSKLEKALKAQNDLIWNIKDELKKVCSTNDLKELLIFNKQVPSGESA
ILDRVADGMVFGALLPCEECGQLVFKSDAYYCTGDVTAWTKCMVKTQTPNRKEWVTPKEFREISYLKCLKVKKQDRIFP
PETSASVAATPPPSTASAPAAVNSSASADKPLSNMKILTGLKLSRNKDEVKAMIEKLGKLTGTANKASLCISTKKEVEK
MNKKMEEVKEAN

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