Datasheet for ABIN925019

PARP2 Protein

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Overview

Quantity:	20 µg
Target:	PARP2
Origin:	Mouse
Source:	Insect cells (Sf9)
Protein Type:	Recombinant

Product Details

Characteristics:	380 units/mg (one unit synthesizes 1 nmole of poly(ADP-ribose) per min at 25°C, pH 7.5.
Purification:	Affinity purified
Purity:	98 % (SDS-PAGE).

Target Details

Target:	PARP2
Alternative Name:	PARP-2 (PARP2 Products)
Background:	The cDNA encoding human poly(ADP-ribose) polymerase (PARP) was cloned by several groups simultaneously. With the discovery of new members (homologs) of the PARP family, PARP is newly referred to as PARP-1. The isolated cDNAs from mouse and human encode a protein with considerable homology to the catalytic domain of PARP-1. This protein, termed PARP-2, is a 64 kDa protein that contains a nuclear localization signal (NLS) and is activated by DNA breaks, although its DNA- binding domain is very different from that of PARP-1. In recent years evidence has accumulated that poly(ADP-ribose) polymerase (PARP) plays a role in DNA repair and a substantial effort has been invested to elucidate the physiological function of the PARP

Target Details

	pathway in cellular recovery from DNA damage. PARP has been found in the base excision repair (BER) complex with DNA polymerase-, ligase III and x-ray repair cross-complementing 1 (XRCC1). PARP- 1 and PARP-2, even though lacking the zinc- finger domains, bind to single and double strand breaks during oxidative stress. In general, it appears that an early enzymatic activation of PARP occurs upon DNA-strand break formation. Binding of PARP to a DNA nick may then cause a transient halt to cellular activity and protect the DNA from sister chromatid associated proteins such as histones. Nicotinamide is cleaved in this step from the substrate NAD+ by PARP and the so synthesized poly(ADP)-ribose (PAR) is then used to generate ATP. Specific
Pathways:	DNA Damage Repair

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Storage:	-80 °C