

## 32-7886: Recombinant Human Poly [ADP-ribose] Polymerase 1/PARP-1 (C-6His)(Discontinued)

**Gene :** PARP1  
**Gene ID :** 142  
**Uniprot ID :** P09874

### Description

Source: Human Cells.  
MW :113.8kD.

Recombinant Human Poly [ADP-ribose] polymerase 1 is produced by our expression system and the target gene encoding Ala2-Trp1014 is expressed Poly [ADP-ribose] polymerase 1(PARP-1) is a chromatin-associated enzyme which modifies various nuclear proteins by poly(ADP-ribosyl)ation. It uses NAD as a substrate to catalyze the covalent transfer of ADP-ribose to a variety of nuclear protein acceptors. PARP-1 is proteolytically cleaved by Caspase 3 in to two fragments of 89 and 24 kDa in one of the hallmark events of apoptosis. It involved in the base excision repair (BER) pathway, by catalyzing the polyation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks. It mediates the polyation of APLF and CHFR, Positively regulates the transcription of MTUS1 and negatively regulates the transcription of MTUS2/TIP150. With EEF1A1 and TXK, forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production. It is required for PARP9 and DTX3L recruitment to DNA damage sites.

### Product Info

**Amount :** 6His) / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of PBS, 20% Glycerol, pH 7.4.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** AESSDKLYRVEYAKSGRASCKKCSSESIPKDSLRLMAMVQSPMFDGKVPWHYHFSCFWKVGHSIRHPDVEVDGFLSELRWDDQKVKKTAEAGGVTGKGQDGGIGSKAEKTLGDFAAEYAKSNRSTCKGCMKIEKGQVRLSKKMVDP  
EKPQLGMIDRWYHPGCFVKNREELGFRPEYSASQLKGFSLLATEDKEALKKQLPGVKSEGKRRKGDVDEVDG  
AKKSKKEKDKDLSKLEKALKAQNLIWNIKDELKKVCSTNDLKELLIFNKQVPSGESAILDRVADGMVFGALLP  
CEECGQLVFKSDAYYCTGDVTAWTKCMVKTQTPNRKEWVTPKEFREISYLKLLKVKKQDRIFPPETSASVAAT  
PPPSTASAPAAVNSSASADKPLSNMKILTLGKLSRNKDEVKAMIEKLGKLTGTANKASLCISTKKEVEKMNKMM  
EEVKEANIRVSEDFLQDVSASTKSLQELFLAHILSPWGAEVKAEPVEVVAPRGKSGAALSCKSKGQVKEEGINK  
SEKRMKLTLLKGGAAVDPDSGLEHSAHVLEKGGKVFSA TLGLVDIVKGTNSYYKLQLEDDKENRYWIFRSWGR  
VGTVIGSNKLEQMPSKEDAIEHFMKLYEEKTGNAWHKNFTKYPKFFPLEIDYQDEEAVKLTVPNGTKSKLP  
KPVQDLIKMIFDVESMCKAMVEYEIDLQKMPLGKLSKRQIQAAYSILSEVQQAVSQGSSDSQILDLSNRFYTLIPH  
DFGMKKPPLLNNADSVQAKVEMLDNLLDIEVAYSLLRGGSDSSKDPIDVNYEKLKTDIKVVD RDSEAEIIRKY  
VKNTHATTHNAYDLEVIDIFKIEREGECQRYKPFKQLHNRLLWHGSRRTNFAGILSQGLRIAPPEAPVTGYMFG  
KGIYFADMVSKSANYCHTSQGDPIGLILLGEVALGNMYELKHASHISLKPCKHSHVKGLGKTPDPSANISLDGV  
DVPLGTGISSGVNDTSLLYNEYIVYDIAQVNLKYLLKLFNFKTSLSLWHHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.