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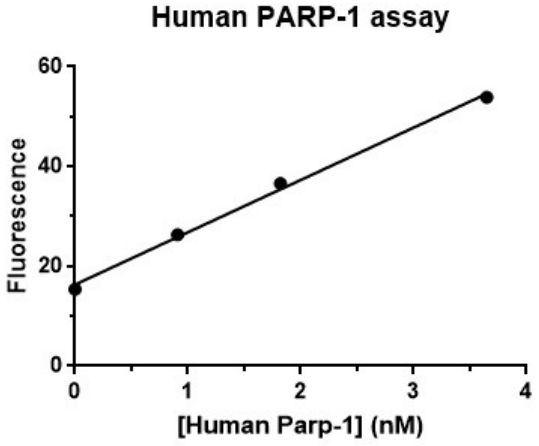
INSTRUCTIONS

ProFoldin
Human Poly (ADP-ribose) Polymerase-1

Human Poly (ADP-ribose) Polymerase-1– for 100 assays Catalog No: PARP-100
Human Poly (ADP-ribose) Polymerase-1– for 1000 assays Catalog No: PARP-1000

Protein construct:	Wild-type Human Poly (ADP-ribose) Polymerase-1 purified from an insect protein expression system.
MW:	120 kDa
Enzyme concentration:	2 µM
Enzyme assay:	The kinase activity of Human Poly (ADP-ribose) Polymerase-1 is measured by using the Human Poly (ADP-ribose) Polymerase-1 Assay Kit (Catalog No. PAR100K).
Storage temperature:	-20 or -80°C. Do not freeze-and-thaw repeatedly.
Enzyme dilution:	Use the 1 x assay to dilute the enzyme just before the assay as needed. Do not store diluted enzyme solution.



The **Human Poly (ADP-ribose) Polymerase-1– for 100 assays (Catalog No: PARP-100)** includes 17 µl of 300 x Human Poly (ADP-ribose) Polymerase-1. It is for 100 assays.

The **Human Poly (ADP-ribose) Polymerase-1– for 1000 assays (Catalog No: PARP-1000)** includes 170 µl of 300 x Human Poly (ADP-ribose) Polymerase-1. It is for 1000 assays.

Assay Protocol using the Human Poly (ADP-ribose) Polymerase-1 Assay Kit

1. **Reagent preparation:**
   10 x DNA: dilute the 100 x DNA 10 –fold with water

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10 x enzyme: dilute the 400 x Human PARP-1 40 –fold with 1 x Buffer
1 mM NAD^+: dilute the 10 mM stock 10 – fold with water
1 x fluorescence dye: dilute the 100 x fluorescence dye 100-fold with water

2. **Reaction**:
The total volume of each reaction mixture is 50 µl including: 30 µl of H_2O, 5 µl of 10 x buffer, 5 µl of 10 x DNA, 5 µl of 10 x human PARP-1, 5 µl of 1 mM NAD^+. Incubate the reaction mixture at 37°C for 60 min.

3. **Detection**:
Add 200 µl of the 1 x fluorescence dye into the 50 µl of the reaction mixture. Measure the fluorescence intensity at 535 nm using the excitation wavelength at 485 nm.

Assay Protocol for enzyme inhibition

The assay can be optimized in terms of assay window, assay linearity and sensitivity to competitive inhibitors. ProFoldin offers HTS assay development service. For more information, please visit our website at http://www.profoldin.com/services.html.

Related Products

HDPA100K	Human DNA Polymerase Alpha Assay Kit
HDPA100KE	Human DNA Polymerase Alpha Assay Kit Plus
DPA100KE	*E. coli* DNA Polymerase III Alpha Assay Kit Plus
DPA100KH	*H. influenzae* DNA polymerase Assay Kit Plus
DPA100KN	*S. pneumoniae* DNA polymerase Assay Kit Plus
DPB100KE	Human DNA Polymerase Beta Assay Kit Plus
DPG100K	Human DNA Polymerase Gamma Assay Kit
RPA100KE	*E. coli* RNA Polymerase Assay Kit Plus
T7RPA100K	T7 RNA Polymerase Assay Kit
MRPA100K	Human Mitochondrial RNA Polymerase Assay Kit
MRPA100KE	Human Mitochondrial RNA Polymerase Assay Kit Plus
RPA100KE	*E. coli* RNA Polymerase Assay Kit Plus
AMV100KE	AMV Reverse Transcriptase Assay Kit Plus
HIV100KE	HIV Reverse Transcriptase Assay Kit Plus
MLV100KE	M-MLV Reverse Transcriptase Assay Kit Plus

For more information of drug targets and enzyme assays, please visit www.profoldin.com or send emails to info@profoldin.com.