PARP1, GST-Tag, PAR-Labeled Recombinant

Catalog: 101774
Lot: 230815

Product Information

Description:	Recombinant human PARP1 (poly-ADP-ribose) polymerase 1), full length, encompassing amino acids 2-1014(end). This construct contains an N-terminal GST-tag followed by a Thrombin Cleavage site. The recombinant protein was affinity purified and PARylated (poly ADP-ribosylated) *in vitro*.
Background:	PAR homeostasis is regulated by the family of PAR polymerases (PARPs) and PARG (Poly (ADP-ribose) glycohydrolase) in response to cellular stress conditions. ADP ribosylation, which is the addition of an ADP-ribose to a protein, is a reversible post-translational modification of proteins mostly involved in the DNA Damage Response (DDR) pathway. Poly-ADP-ribosylation (termed PARylation) is the addition of linear or branched chains of ADP-ribose. PARP and PARG activity are linked to cellular responses in inflammation, ischemia, stroke, and cancer. PARP inhibitors have been used in cancer treatment with success, leading to synthetic lethality when homologous recombination repair (HRR) is already defective. Further studies of PARP will elucidate how the levels of PARylated proteins contribute to disease and can be modulated to provide therapeutic benefit.
Species:	Human
Construct:	PARP1 (GST-Th-2-1014(end))-(PAR)
Concentration:	0.18 mg/ml
Expression System:	Sf9
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 20% glycerol, and 3 mM DTT
MW:	139 kDa + PAR
Genbank Accession:	NM_001618
Label:	Poly-ADP-ribosylation (PAR) was performed *in vitro* after protein purification.
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Applications:	Useful for SDS-PAGE.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining