

# **Screening Libraries**

**Proteins** 



# **Product** Data Sheet

# PARP14 Protein, Human (His, Strep)

Cat. No.: HY-P701952

Synonyms: PARP14; Protein mono-ADP-ribosyltransferase PARP14; ADP-ribosyltransferase diphtheria toxin-

like 8; ARTD8; B aggressive lymphoma protein 2; Poly [ADP-ribose] polymerase 14; PARP-14

Species: Human Source: E. coli

Accession: Q460N5 (F1208-E1387)

Gene ID: 54625

Molecular Weight:

### **PROPERTIES**

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

## **DESCRIPTION**

#### Background

PARP14 Protein, an ADP-ribosyltransferase, facilitates the mono-ADP-ribosylation of glutamate residues on target proteins, distinguishing itself from PARP1 and PARP2 by its inability to mediate poly-ADP-ribosylation. Specifically, it has been shown to catalyze the mono-ADP-ribosylation of STAT1 at 'Glu-657' and 'Glu-705', leading to decreased STAT1 phosphorylation and subsequent negative regulation of pro-inflammatory cytokine production in macrophages following IFNG stimulation. However, the exact role of ADP-ribosylation in preventing STAT1 phosphorylation has been debated, with suggestions that the inhibition may be a result of STAT1 'Lys-703' sumoylation. Additionally, PARP14 mono-ADP-ribosylates STAT6, enhancing STAT6-dependent transcription, and in macrophages, it positively regulates MRC1 expression in response to IL4 stimulation by promoting STAT6 phosphorylation. Furthermore, PARP14 engages in mono-ADP-ribosylation of PARP9.

Caution: Product has not been fully validated for medical applications. For research use only.

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