

Recombinant PARP11 protein

Catalog No: 82150, 82750
Expressed In: Baculovirus

Quantity: 10, 1000 µg
Source: Human

Buffer Contents: Recombinant PARP11 protein is supplied in 25 mM HEPES pH 7.5, 300 mM NaCl, 20% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

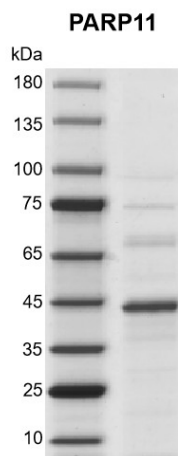
Background: **PARP11(Protein mono-ADP-ribosyltransferase PARP11)**, also known as ARTD11, is a mono ADPribosyltransferase (MARylator) within the **PARP** family that localizes to the nuclear envelope. Its primary function is linked to the regulation of nuclear architecture and nucleocytoplasmic transport. **PARP11** interacts with and MARylates specific components of the nuclear pore complex (NPC), influencing protein import into the nucleus. A key functional partner is the Ran GTPase, a critical regulator of transport directionality. Furthermore, **PARP11** plays a role in cell cycle control, particularly during mitosis, by associating with the kinetochore and contributing to proper chromosome segregation. It also functions as an interferon-stimulated gene (ISG), suggesting a role in the antiviral response, potentially by modifying host or viral proteins to restrict infection. Thus, **PARP11** is emerging as a multifaceted regulator connecting nuclear envelope integrity, intracellular transport, and innate immunity.

Protein Details: Recombinant PARP11 protein was expressed in a baculovirus expression system as the full length protein (accession number NP_065100.2) with an N-terminal FLAG tag. The molecular weight of PARP11 is 40.87 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

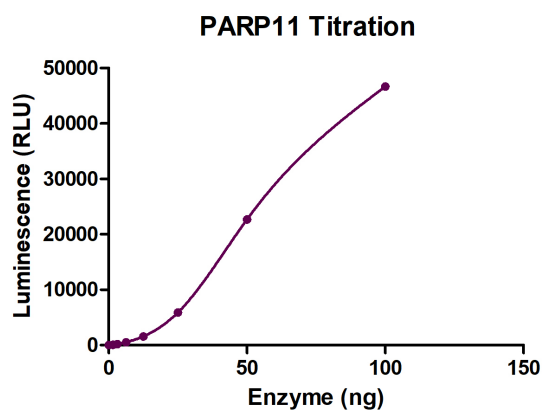


Recombinant PARP11 protein gel.

PARP11 protein was run on an 4-20% SDS-PAGE gel and stained with Coomassie blue.

MW: 40.87 kDa

Purity: > 90%



ELISA for Recombinant PARP11 protein activity assay.

25 μ M NAD-Biotin and PARP11 were added into ELISA plate (coated with histone H2A and H2B mixture in ADPR Buffer and incubated for 1 hour at room temperature. Following Streptavidin-HRP and ECL incubation, the plate was read in a luminometer or microtiter-plate reader.