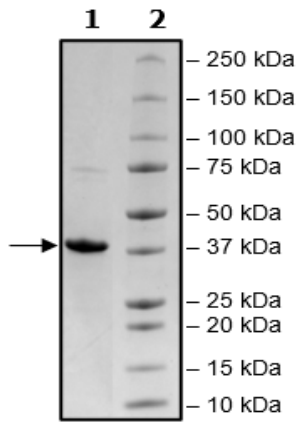


Product Information

Description:	Recombinant human ADPRS (ADP-ribosyl-acceptor hydrolase 3, or ARH3), full length encompassing amino acids 2-363(end). This construct contains an N-terminal His-tag (6xHis). This protein was affinity purified.
Background:	ADPRS, also known as ADP-ribosyl-acceptor hydrolase 3 or ARH3, is part of the DNA damage response machinery, and removes ADP-ribose from serine residues in a Mg ²⁺ -dependent manner. It acts sequentially to PARG (poly(ADP-ribose) glycohydrolase) and it has a protective role by decreasing the levels of PAR in the cell, which stops mitochondria from releasing PAR-driven AIF (apoptosis inducing factor). Mutations that result in loss of function of this protein lead to CONDSIAS (stress-induced childhood-onset neurodegeneration with variable ataxia and seizures), a disease with multiple clinical expressions. The development and use of ADPRS inhibitors allows us a better understanding of the DNA damage response pathway and opens new avenues for cancer treatment.
Species:	Human
Construct:	ADPRS (His-2-363(end))
Concentration:	1.89 mg/ml
Expression System:	<i>E. coli</i>
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:	40 kDa
Genbank Accession:	NM_017825.3
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.
Assay Conditions:	Various concentrations of ARH3 were incubated at room temperature with 4 μM TFMU-ADPr (substrate) and the fluorogenic product was measured after 1 hour (λexcitation: 385 nm / λemission: 502 nm).
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



ADPRS Activity

