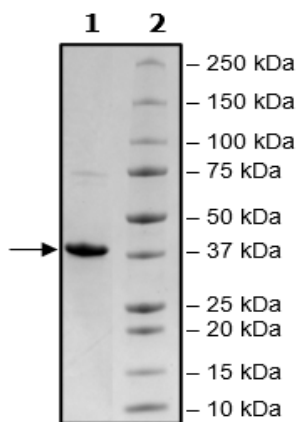


## Product Information

<b>Description:</b>	Recombinant human ARH3 (ADP-ribosyl-acceptor hydrolase 3), also known as ADPRS, full length encompassing amino acids 2-363(end). This construct contains an N-terminal His-tag (6xHis). This protein was affinity purified.
<b>Background:</b>	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 <sup>2+</sup> -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.
<b>Species:</b>	Human
<b>Construct:</b>	ADPRS (His-2-363(end))
<b>Concentration:</b>	1.89 mg/ml
<b>Expression System:</b>	<i>E. coli</i>
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 20% glycerol, and 3 mM DTT
<b>MW:</b>	40 kDa
<b>Genbank Accession:</b>	NM_017825.3
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	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.
<b>Assay Conditions:</b>	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).
<b>Applications:</b>	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining



### ADPRS Activity

