

## Recombinant Human Ataxin-3/ATXN3 protein (His Tag)

Catalog Number: PDEH100968

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

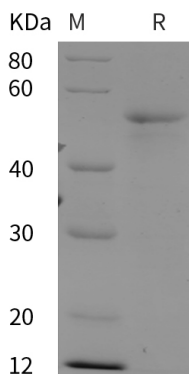
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human Ataxin-3 protein Met1-Lys370, with an N-terminal His & C-terminal His
<b>Calculated MW</b>	40.6 kDa
<b>Observed MW</b>	50 kDa
<b>Accession</b>	P54252-2
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Ataxin-3 is a ubiquitously expressed nuclear protein that serves as a deubiquitinating enzyme (DUB) involved in protein homeostasis and quality control, myogenesis and degradation of misfolded chaperone substrates. As a DUB, it has two distinct features. Its N-terminal Josephin domain confers cysteine protease activity to Ataxin-3 which is important for hydrolyzing ubiquitin (Ub) linkages. The second important feature is its three Ub-interacting motifs (UIMs) through which it binds Ub conjugates and ubiquitinated proteins and bring them into proximity to trim or edit specific linkages within these Ub conjugates. It binds long poly-Ub chains and trims them. However, it has weak or no activity against chains of 4 or less Ub.

### For Research Use Only