

# Recombinant human Ataxin-3 protein

Catalog Number: ATGP0344

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-370aa

### UniProt No.

P54252

### NCBI Accession No.

AAH33711

### Alternative Names

Ataxin 3, ATX3, MJD, MJD1, SCA3, JOS, ATXN3, AT3, EC 3.4.22., Josephin, Machado Joseph disease, Machado Joseph disease protein 1, Machado-Joseph disease protein 1 homolog, MJD gene, RscA3, SCA3 gene, Spinocerebellar ataxia type 3 protein

## PRODUCT SPECIFICATION

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### Molecular Weight

42.4 kDa (370aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 2mM DTT, 50mM NaCl, 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

Non-Tagged

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

Ataxin 3 is also known as Machado-Joseph disease protein 1. Machado-Joseph disease is one of several hereditary autosomal dominant neurodegenerative disorders. This protein contains trinucleotide CAG repeats in

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the coding region, and the expansion of these repeats from the normal 13-36 to 68-79 is the cause of Machado-Joseph disease. Ataxin 3 interacts with the major histone acetyltransferases cAMP-response-element binding protein (CREB) -binding protein, p300, and p300/CREB-binding protein-associated factor and inhibits transcription by these coactivators. Also, ataxin-3 is a proteasome-associated factor that mediates the degradation of ubiquitinated proteins. Recombinant human Ataxin-3 was expressed in *E. coli* and purified by using conventional chromatography.

## Amino acid Sequence

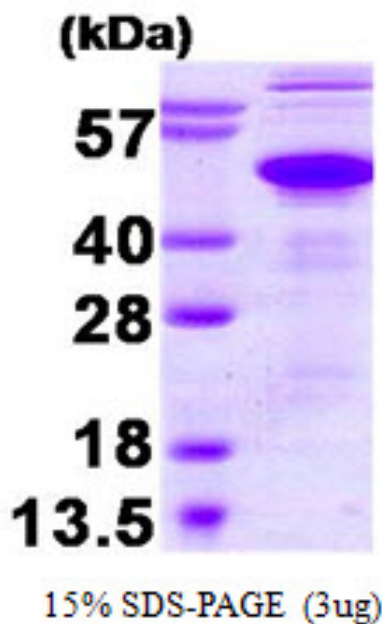
MESIFHEKQE GSLCAQHCLN NLLQGEYFSP VELSSIAHQL DEEERMMAE GGVTSEDYRT FLOQPSTGNMD DSGFFSIQVI  
SNALKVWGLE LILFNSPEYQ RLRIDPNER SFICNYKEHW FTVRKLKQW FNLNSLLTGP ELISDTYLAL FLAQLQQEGY  
SIFVVKGDLP DCEADQLLQM IRVQQMHRPK LIGEELAQLK EQRVHKTDL RVLEANDGSG MLDEDEEDLQ RALALSRQEI  
DMEDEEADLR RAIQLSMQGS SRNISQDMTQ TSGTNLTSEE LRKRREAYFE KQQKQKQQQ QQQKQQQQQ  
QQQKQKQKQ QQQKQKQKQ QQQKQKQKQ QQQKQKQKQ

## General References

Doss Pepe EW., et al. (2003). *Mol Cell Biol.* 23(18):6469-83.  
Paulson., et al. (1997). *Ann Neurol.* 41(4):453-62.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.