

32-3273: ATXN3 Recombinant Protein

Alternative Name : Ataxin-3, Machado-Joseph disease protein 1, Spinocerebellar ataxia type 3 protein, ATXN3, ATX3, MJD, MJD1, SCA3, AT3, JOS.

Description

Source : Escherichia Coli. ATXN3 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 370 amino acids (1-370 a.a.) and having a molecular mass of 42.4kDa. ATXN3 is purified by proprietary chromatographic techniques. Ataxin 3 is otherwise known as Machado-Joseph disease protein 1. Machado-Joseph disease is a hereditary autosomal dominant neurodegenerative disorder. ATXN3 contains trinucleotide CAG repeats in the coding region, and the expansion of these repeats from the normal 13-36 to 68-79 causes the Machado-Joseph disease. ATXN3 is a poly-ubiquitin-binding protein whose cellular turnover is regulated by its catalytic activity. In addition, ATXN3 is a proteasome-associated factor which mediates the degradation of ubiquitinated proteins. ATXN3 folds reversibly using a single intermediate; partial destabilization of ATXN3 by chemical denaturation causes the formation of fibrillar aggregates by the non-pathological variant. 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 hinders transcription by these coactivators.

Product Info

Amount : 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : The ATXN3 protein solution contains 20mM Tris-HCl buffer (pH 7.5), 2mM DTT, 50mM NaCl and 10% glycerol.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : MESIFHEKQE GSLCAQHCLN NLLQGEYFSP VELSSIAHQL DEEERMMAE GGVTSedyRT
FLQQPSGNMD DSGFFSIQVI SNALKVWGLELILFNSPEYQ RLRIDPNER SFICNYKEHW
FTVRKLGKQW FNLNLLTGP ELISDTYLAL FLAQLQEGY SIFVVKGDLP DCEADQLLQM
IRVQQMHRPK LIGEELAQLK EQRVHKTDLE RVLEANDGSG MLDEDEEDLQ RALALSRQEI
DMEDEEADLR RAIQLSMQGS SRNISQDMTQ TSGTNLTSEE LRKRREAYFE KQQQKQQQQQ
QQQQQQQQQQ QQQQGDLSGQ SSHPCERPAT SSGALGSDLG DAMSEEDMLQ AAVTMSLETV
RNDLKTEGKK.

