



# Recombinant Rat Ataxin-1 (Atxn1)

<b>Product Code</b>	CSB-EP723589RA-B
<b>Abbreviation</b>	Atxn1
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q63540
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MKSNQERSNE CLPPKKREIP ATSRPSEEKA TALPSDNHCV EGVAWLPSTP GSRGHGGGRH GPAGTSGEHG LQGMGLHKAL SAGLDYSPPS APRSVPTANT LPTVYPPPQS GTPVSPVQYA HLSHTFQFIG SSQYSGPYAG FIPSQLISPP GNPVTSAVAS AAGATTPSQR SQLEAYSTLL ANMGSLSQAP GHKVEPPPQQ HLGRAAGLVN PGSPPTQQN QYIHSSSPQ SSGRATSPPI PVHLHPHQTIPHTLTLGPS SQVVVQYSDA GGHFVPREST KKAESSRLQQ AMQAKEVLNG EMEKSRRYGA SSSVELSLGK TSSKSVPHPY ESRHVVHPS PADYSSRDTS GVRGSVMVLP NSSTPSADLE TQQATHREAS PSTLNDKSGL HLGKPGHRSY ALSPHTVIQT THSASEPLPV GLPATAFYAG AQPPVIGYLS SQQQAITYAG GLPQHLVIPG TQPLLIPVGS PDMDTPGAAS AIVTSSPQFA AVPHTFVTTA LPKSENFNPE ALVTQAAYPA MVQAQIHLPV VQSVASPAAA SPTLPPYFMK GSIIQLANGE LKKVEDLKTE DFIQSAEISN DLKIDSSTVE RIEDSHSPGV AVIQFAVGEH RAQVSVEVLV EYPFFVFGQG WSSCCPERTS QLFDLPCSKL SVGDVCISLT LKNLKNGSVK KGQVPDPASA LLKHAKTDSL AGSRHRYAEQ ENGINQGSAQ VLENGELKF PEKIGLPAAP FLTKIEPSK TATRKRWSA PETRKLEKSE DEPPLTLPKP SLIPQEVKIC IEGRSNVVK
<b>Source</b>	E.coli
<b>Target Names</b>	Atxn1
<b>Protein Names</b>	Recommended name: Ataxin-1 Alternative name(s): Spinocerebellar ataxia type 1 protein homolog
<b>Expression Region</b>	1-789
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	The autosomal dominant cerebellar ataxias (ADCA) are a heterogeneous group of neurodegenerative disorders characterized by progressive degeneration of the cerebellum, brain stem and spinal cord. Clinically, ADCA has been divided into three groups: ADCA types I-III. ADCAI is genetically heterogeneous, with



five genetic loci, designated spinocerebellar ataxia (SCA) 1, 2, 3, 4 and 6, being assigned to five different chromosomes. ADCAII, which always presents with retinal degeneration (SCA7), and ADCAIII often referred to as the `pure cerebellar syndrome (SCA5), are most likely homogeneous disorders. Several SCA genes have been cloned and shown to contain CAG repeats in their coding regions. ADCA is caused by the expansion of the CAG repeats, producing an elongated polyglutamine tract in the corresponding protein. The expanded repeats are variable in size and unstable, usually increasing in size when transmitted to successive generations. The function of the ataxins is not known. This locus has been mapped to chromosome 6, and it has been determined that the diseased allele contains 41-81 CAG repeats, compared to 6-39 in the normal allele. At least two transcript variants encoding the same protein have been found for this gene.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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