

## ATXN1 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1498a

## Specification

# ATXN1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, IHC, FC, ICC, E <u>P54253</u> Human Mouse Monoclonal IgG1 87kDa KDa

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.Tissue specificity: Widely expressed throughout the body.

## Immunogen

Purified recombinant fragment of human ATXN1 expressed in E. Coli.

#### Formulation

Ascitic fluid containing 0.03% sodium azide.

# ATXN1 Antibody - Additional Information

Gene ID 6310

**Other Names** Ataxin-1, Spinocerebellar ataxia type 1 protein, ATXN1, ATX1, SCA1

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~N/A



Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** ATXN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **ATXN1 Antibody - Protein Information**

Name ATXN1

Synonyms ATX1, SCA1

**Function** 

Chromatin-binding factor that repress Notch signaling in the absence of Notch intracellular domain by acting as a CBF1 corepressor. Binds to the HEY promoter and might assist, along with NCOR2, RBPJ- mediated repression. Binds RNA in vitro. May be involved in RNA metabolism (PubMed:<a href="http://www.uniprot.org/citations/21475249" target="\_blank">21475249</a>). In concert with CIC and ATXN1L, involved in brain development (By similarity).

**Cellular Location** Cytoplasm. Nucleus Note=Colocalizes with USP7 in the nucleus

**Tissue Location** Widely expressed throughout the body.

## **ATXN1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

ATXN1 Antibody - Images





Figure 1: Western blot analysis using ATXN1 mAb against HEK293 (1) and ATXN1(AA: 645-815)-hlgGFc transfected HEK293 (2) cell lysate.



Figure 2: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues (left) and lung cancer tissues (right) using ATXN1 mouse mAb with DAB staining.



Figure 3: Immunofluorescence analysis of NTERA-2 cells using ATXN1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.





Figure 4: Flow cytometric analysis of Jurkat cells using ATXN1 mouse mAb (green) and negative control (purple).

# **ATXN1 Antibody - References**

1. Nature. 2008 Apr 10;452(7188):713-8. 2. Biochem Biophys Res Commun. 2008 Jun 27;371(2):256-60. 3. Indian J Med Res. 2007 Nov;126(5):465-70.