



## ATX1 (Ataxin 1)

### Catalog number

A4159-04

### Supplier

United States Biological

Spinocerebellar ataxia 1 (SCA1), an autosomal dominant neurodegenerative disorder, is characterized by slurred speech, loss of limb coordination, and gait abnormalities resulting from the degeneration of cerebellar Purkinje cells and of a subset of brainstem neurons (1). Individuals with SCA1 have a highly polymorphic CAG repeat expansion encoding a polyglutamine tract in ataxin-1 (2). Akt phosphorylates ataxin-1 at Ser776, which regulates an association with 14-3-3. This interaction increases ataxin-1 stabilization and accumulation resulting in enhanced neurodegeneration (3). In addition, HSP70 controls the effect that phosphorylation has on ataxin-1 stability (4).

### Applications

Suitable for use in Western Blot. Other applications have not been tested.

### Recommended Dilutions

Western Blot: 1:1000

Optimal dilutions to be determined by the researcher.

### Storage and Stability

May be stored at 4°C for short-term only. For long-term storage, aliquot and store at -20°C. Aliquots are stable for at least 12 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

### Immunogen

Synthetic peptide corresponding to human ataxin-1.

### Formulation

Supplied as a liquid in 10mM sodium HEPES, pH 7.5, 150mM sodium chloride, 0.1mg/ml BSA, 50% glycerol.

### Purity

Purified by Protein A and peptide affinity chromatography.

### Specificity

Recognizes endogenous levels of total human ataxin-1 protein. Species Crossreactivity: mouse, rat and *D. melanogaster*

### Product Type

Pab

### Source

human

**Isotype**

IgG

**Grade**

Affinity Purified

**Applications**

WB

**Crossreactivity**

Dr Hu Mo Rt

**Storage**

-20°C

**MW**

105

**Reference**

1. Zoghbi, H.Y. and Orr, H.T. (2000) *Annu Rev Neurosci* 23, 217-47. Orr, H.T. et al. (1993) *Nat Genet* 4, 221-6. Chen, H.K. et al. (2003) *Cell* 113, 457-68. Jorgensen, N.D. et al. (2007) *J Neurochem* 102, 2040-8.