

Ataxin-1 Antibody

100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications W Endogenous	Species Cross-Reactivity* H, M, R, Dm	Molecular Wt. 105 kDa	Source Rabbit**
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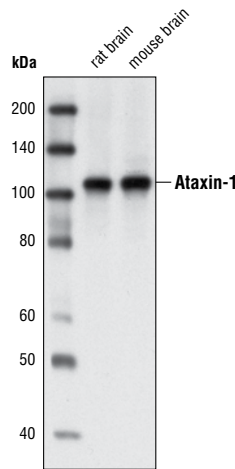
Background: Spinocerebellar ataxia 1 (SCA1), an autosomal dominant neurodegenerative disorder, is characterized by slurred speech, loss of limb coordination, and gait abnormalities resulting from the degeneration of cerebellar Purkinje cells and of a subset of brainstem neurons (1). Individuals with 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).

Specificity/Sensitivity: Ataxin-1 Antibody detects endogenous levels of total ataxin-1 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to human ataxin-1. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

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



Western blot analysis of extracts from rat and mouse brain using Ataxin-1 Antibody.

Entrez-Gene ID #6310
Swiss-Prot Acc. #P54253

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA—Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.