

Product Information

Anti-Ataxin-7

Developed in Rabbit, Affinity Isolated Antibody

Product Number **A 8104**

Product Description

Anti-Ataxin-7 was developed in rabbit using a synthetic peptide M(1)SERAADDVRGEP RRAA(17) C, corresponding to amino acid residues 1-17 from human ataxin-7 as the immunogen. This sequence is completely conserved in mouse ataxin-7. The antibody was affinity isolated on immobilized immunogen.

Anti-Ataxin-7 recognizes an ~96 kDa protein representing human ataxin-7 in transfected COS-1 cells by immunoblotting.

Ataxin-7, the protein product of the SCA7 gene, is a protein of 892 amino acids, which carries an expandable poly(Q) region close to the N-terminus.¹ When the polyglutamine (CAG) repeats are abnormally expanded, the result is spinocerebellar ataxia type 7 (SCA7), one of a family of hereditary neurodegenerative polyglutamine expansion diseases that includes Huntington's disease. In SCA7, ataxin-7 accumulates in intranuclear inclusions and can result in cell death. This autosomal dominant cerebellar ataxia primarily affects the cerebellum, retina, and brain stem and causes dementia, macular degeneration and other neurodegenerative characteristics.^{2,3} Although the exact function of ataxin-7 is unknown, recent evidence shows that it may be involved in histone acetyltransferase activity.⁴

Reagent

The antibody is supplied as 100 µg (1 mg/mL) of affinity-isolated antibody in phosphate buffered saline containing 1.0 mg/mL BSA and 0.05 % sodium azide as preservative.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling.

Storage/Stability

Store at -20 °C. For extended storage, freeze in working aliquots. Avoid repeated freezing and thawing. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution is 1 µg/ml for immunoblotting.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, determination of optimal working dilutions by titration test is recommended.

References

1. Scheel, H., et al., Elucidation of ataxin-3 and ataxin-7 function by integrative bioinformatics, *Hum. Mol. Genet.*, **12**, 2845-2852 (2003).
2. Cancel, G., et al., Distribution of ataxin-7 in normal human brain and retina, *Brain*, **123**, 2519-2530 (2000).
3. Yvert, G., et al., SCA7 mouse models show selective stabilization of mutant ataxin-7 and similar cellular responses in different neuronal cell types, *Hum. Mol. Genet.*, **10**, 1679-1692 (2001).
4. Helmlinger, D., et al., Ataxin-7 is a subunit of GCN5 histone acetyltransferase-containing complexes, *Hum. Mol. Genet.*, **13**, 1257-1265 (2004).

MCT,PHC 02/05-1

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