

Ataxin-7 (N-17): sc-21110

BACKGROUND

The human Ataxin-7 gene, also known as spinocerebellar ataxia 7 or SCA7, maps to chromosome 3p14.1, has a 2,727-bp open reading frame, and encodes a 892 amino acid protein containing a nuclear localization signal and a polyglutamine tract. SCA7 is an autosomal dominant neurodegenerative disorder characterized by ataxia and selective neuronal cell loss caused by the expansion of a translated CAG repeat encoding a polyglutamine tract in Ataxin-7, which is the SCA7 gene product. Ataxin-7 is expressed within neurons both affected and unaffected in SCA7 pathology with subcellular localization being variable depending upon the neuronal subtype. Polyglutamine expanded in Ataxin-7 may carry out its pathogenic effects in the nucleus by altering the matrix-associated nuclear structure and/or by disrupting nucleolar function.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ATXN7 (human) mapping to 3p14.1; Atxn7 (mouse) mapping to 14 A1.

SOURCE

Ataxin-7 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Ataxin-7 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-21110 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ataxin-7 (N-17) is recommended for detection of Ataxin-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Ataxin-7 (N-17) is also recommended for detection of Ataxin-7 in additional species, including canine and bovine.

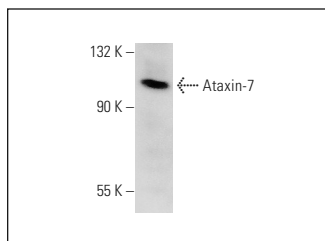
Suitable for use as control antibody for Ataxin-7 siRNA (h): sc-40360, Ataxin-7 siRNA (m): sc-40361, Ataxin-7 shRNA Plasmid (h): sc-40360-SH, Ataxin-7 shRNA Plasmid (m): sc-40361-SH, Ataxin-7 shRNA (h) Lentiviral Particles: sc-40360-V and Ataxin-7 shRNA (m) Lentiviral Particles: sc-40361-V.

Positive Controls: HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Ataxin-7 (N-17): sc-21110. Western blot analysis of Ataxin-7 expression in HeLa nuclear extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.