

Ataxin-7 (C-21): sc-21112

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 (C-21) 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.

APPLICATIONS

Ataxin-7 (C-21) is recommended for detection of Ataxin-7 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (C-21) is also recommended for detection of Ataxin-7 in additional species, including equine and avian.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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