

Aprataxin (H-15): sc-48841

BACKGROUND

Aprataxin is a nuclear protein present in both the nucleoplasm and the nucleolus which is a member of the histidine triad (HIT) superfamily. Aprataxin is involved in DNA single-strand break repair, mediating protein-protein interactions with molecules responding to DNA damage. Aprataxin contains three conserved domains: an N-terminal forkhead-associated (FHA) domain which mediates protein-protein interactions, a HIT domain that is similar to Hint and a C-terminal zinc finger domain. Loss of function mutations in APTX, the gene encoding for Aprataxin, destabilize the Aprataxin protein and result in a rare neurological disorder known as ataxia-oculomotor apraxia, characterized by abnormal movements of the head and eyes. These mutations either target the HIT domain or truncate the protein N-terminal to a zinc finger.

CHROMOSOMAL LOCATION

Genetic locus: APTX (human) mapping to 9p21.1; Aptx (mouse) mapping to 4 A5.

SOURCE

Aprataxin (H-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Aprataxin of human origin.

PRODUCT

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

Aprataxin (H-15) is also recommended for detection of Aprataxin isoforms 1-9 in additional species, including canine, bovine and porcine.

Blocking peptide available for competition studies, sc-48841 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48841 X, 200 µg/0.1 ml.

APPLICATIONS

Aprataxin (H-15) is recommended for detection of Aprataxin isoforms 1-9 of mouse, rat and human 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).

Aprataxin (H-15) is also recommended for detection of Aprataxin isoforms 1-9 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Aprataxin siRNA (h): sc-60196, Aprataxin siRNA (m): sc-60197, Aprataxin shRNA Plasmid (h): sc-60196-SH, Aprataxin shRNA Plasmid (m): sc-60197-SH, Aprataxin shRNA (h) Lentiviral Particles: sc-60196-V and Aprataxin shRNA (m) Lentiviral Particles: sc-60197-V.

Aprataxin (H-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

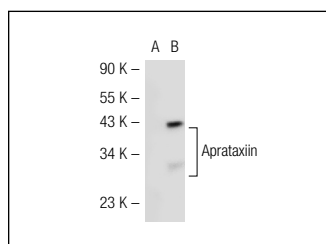
Molecular Weight of Aprataxin isoforms 1-10: 13-41 kDa.

Positive Controls: Aprataxin (m): 293T Lysate: sc-124980, HeLa nuclear extract: sc-2120 or NCI-H226 whole cell lysate: sc-364256.

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.

DATA



Aprataxin (H-15): sc-48841. Western blot analysis of Aprataxin expression in non-transfected: sc-117752 (A) and mouse Aprataxin transfected: sc-124980 (B) 293T whole cell lysates.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Aprataxin (B-12): sc-374108** or **Aprataxin (E-9): sc-393648**, our highly recommended monoclonal alternatives to Aprataxin (H-15).