

Aladin (N-12): sc-34104

BACKGROUND

Aladin (Adracalin) belongs to a family of WD repeat-containing proteins. These proteins have a wide variety of functions, including signal transduction regulation, RNA processing and transcription. Aladin plays a role in peripheral and central nervous system development. It is widely expressed, with the highest expression seen in pituitary gland, corpus callosum, cerebellum, adrenal gland and gastrointestinal structures. Defects in Aladin cause the autosomal recessive disorder achalasia-addisonianism-alacrima (triple A) syndrome. Triple A syndrome is characterized by achalasia, alacrima and adrenocorticotropin-resistant adrenal insufficiency. Robust expression in neural systems associated with cognitive, motor and sensory functions is consistent with the myriad of symptoms experienced by patients with triple A syndrome.

REFERENCES

1. Tullio-Pelet, A., et al. 2000. Mutant WD-repeat protein in triple A syndrome. *Nat. Genet.* 26: 332-335.
2. Katsumata, N., et al. 2002. Analysis of the AAAS gene in a Japanese patient with triple A syndrome. *Endocr. J.* 49: 49-53.
3. Houlden, H., et al. 2002. Clinical and genetic characterization of families with triple A (Allgrove) syndrome. *Brain* 125: 2681-2690.
4. Cronshaw, J.M., et al. 2003. The nuclear pore complex protein Aladin is mislocalized in triple A syndrome. *Proc. Natl. Acad. Sci. USA* 100: 5823-5827.
5. Salehi, M., et al. 2005. The diagnosis of adrenal insufficiency in a patient with Allgrove syndrome and a novel mutation in the Aladin gene. *Metabolism* 54: 200-205.
6. Storr, H.L., et al. 2005. Identification of the sites of expression of triple A syndrome mRNA in the rat using *in situ* hybridisation. *Neuroscience* 131: 113-123.

CHROMOSOMAL LOCATION

Genetic locus: AAAS (human) mapping to 12q13.13; Aaas (mouse) mapping to 15 F3.

SOURCE

Aladin (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Aladin 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.

Blocking peptide available for competition studies, sc-34104 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Aladin (N-12) is recommended for detection of Aladin 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).

Aladin (N-12) is also recommended for detection of Aladin in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Aladin siRNA (h): sc-45244, Aladin siRNA (m): sc-45245, Aladin shRNA Plasmid (h): sc-45244-SH, Aladin shRNA Plasmid (m): sc-45245-SH, Aladin shRNA (h) Lentiviral Particles: sc-45244-V and Aladin shRNA (m) Lentiviral Particles: sc-45245-V.

Molecular Weight of Aladin: 60 kDa.

Positive Controls: Rat cerebellum extract: sc-2398, mouse cerebellum extract: sc-2403 or HeLa whole cell lysate: sc-2200.

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.

PROTOCOLS

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