

ARKL1/Arkadia 2 (P-20): sc-84702

BACKGROUND

ARKL1, also known as C18orf25, is a 403 amino acid protein that belongs to the ubiquitin ligase family and may be involved in the pathogenesis of psychiatric illnesses, including schizophrenia and bipolar affective disorder. The mouse and rat orthologs of ARKL1 are known as Arkadia 2. Human ARKL1 is expressed as two alternatively spliced isoforms that are encoded by a gene that maps to chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

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3. Raghavan, S.C., et al. 2004. A non-B-DNA structure at the Bcl-2 major breakpoint region is cleaved by the RAG complex. *Nature* 428: 88-93.
4. Grosso, S., et al. 2005. Chromosome 18 aberrations and epilepsy: a review. *Am. J. Med. Genet. A* 134: 88-94.
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7. Aurizi, C., et al. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian patients with erythropoietic protoporphyria. *Mol. Genet. Metab.* 90: 402-407.
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CHROMOSOMAL LOCATION

Genetic locus: C18orf25 (human) mapping to 18q21.1; 8030462N17Rik (mouse) mapping to 18 E3.

SOURCE

ARKL1/Arkadia 2 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARKL1 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-84702 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARKL1/Arkadia 2 (P-20) is recommended for detection of ARKL1 of human origin and Arkadia 2 of 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).

ARKL1/Arkadia 2 (S-16) is also recommended for detection of ARKL1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ARKL1 siRNA (h): sc-72536, Arkadia 2 siRNA (m): sc-141234, ARKL1 shRNA Plasmid (h): sc-72536-SH, Arkadia 2 shRNA Plasmid (m): sc-141234-SH, ARKL1 shRNA (h) Lentiviral Particles: sc-72536-V and Arkadia 2 shRNA (m) Lentiviral Particles: sc-141234-V.

Molecular Weight of ARKL1/Arkadia 2: 43 kDa.

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.

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.