



AIPL1 (C-13): sc-46717

BACKGROUND

The inherited blindness associated protein, aryl hydrocarbon receptor interacting protein-like 1 (AIPL1), interacts with the cell cycle regulator protein NUB1. AIPL1 is crucial for protein folding and stabilization, as well as for protein trafficking. It localizes to the nucleus or cytoplasm and is highly expressed in the pineal gland and the retina. In the retina, AIPL1 is expressed in both developing cone and rod photoreceptors, but it is restricted to rod photoreceptors in the adult human retina. Defects in the gene encoding for AIPL1 can cause Leber congenital amaurosis type IV, an early-onset, inherited autosomal recessive disorder that results in childhood blindness.

REFERENCES

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7. Liu, X., et al. 2004. AIPL1, the protein that is defective in Leber congenital amaurosis, is essential for the biosynthesis of retinal rod cGMP phosphodiesterase. *Proc. Natl. Acad. Sci. USA* 101:13903-13908.
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CHROMOSOMAL LOCATION

Genetic locus: AIPL1 (human) mapping to 17p13.1; Aipl1 (mouse) mapping to 11 B4.

SOURCE

AIPL1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of AIPL1 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-46717 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AIPL1 (C-13) is recommended for detection of AIPL1 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); may cross-react with AIPL2.

Suitable for use as control antibody for AIPL1 siRNA (h): sc-60062 and AIPL1 siRNA (m): sc-60063.

Molecular Weight of AIPL1: 44 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.