SANTA CRUZ BIOTECHNOLOGY, INC.

AIFL (Q-14): sc-86279

BACKGROUND

AIFL (apoptosis-inducing factor-like), also known as AIFM3 (apoptosis-inducing factor, mitochondrion-associated, 3), is a 605 amino acid protein that localizes to the mitochondrion and contains one rieske domain. Expressed ubiquitously in tissues including liver, thymus, ovary, bone marrow and cerebral cortex, AIFL functions to induce apoptosis, specifically through a caspase-dependent pathway, and may also play a role in the modulation of mitochondrial membrane potential. Multiple isoforms of AIFL exist due to alternative splicing events. The gene encoding AIFL maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, neurofibromatosis type 2, autism and schizophrenia.

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CHROMOSOMAL LOCATION

Genetic locus: AIFM3 (human) mapping to 22q11.21; Aifm3 (mouse) mapping to 16 A3.

SOURCE

AIFL (Q-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of AIFL of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86279 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AIFL (Q-14) is recommended for detection of AIFL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

AIFL (Q-14) is also recommended for detection of AIFL in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for AIFL siRNA (h): sc-72467, AIFL siRNA (m): sc-140965, AIFL shRNA Plasmid (h): sc-72467-SH, AIFL shRNA Plasmid (m): sc-140965-SH, AIFL shRNA (h) Lentiviral Particles: sc-72467-V and AIFL shRNA (m) Lentiviral Particles: sc-140965-V.

Molecular Weight of AIFL: 66 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.