

ANT4 (A-13): sc-104053

BACKGROUND

ANT4 (adenine nucleotide translocator 4), also known as ALC25A31 (solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 31), AAC4 or SFEC, is a 315 amino acid multi-pass membrane protein that localizes to the inner mitochondrial membrane and contains 3 solar repeats. Expressed in testis, brain, sperm and liver, ANT4 functions to catalyze the exchange of ATP and ADP across the mitochondrion, possibly mediating energy generation, energy consumption and, ultimately, motility, in the distal flagellum. The gene encoding ANT4 maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC25A31 (human) mapping to 4q28.1; Slc25a31 (mouse) mapping to 3 B.

SOURCE

ANT4 (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANT4 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-104053 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ANT4 (A-13) is recommended for detection of ANT4 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).

ANT4 (A-13) is also recommended for detection of ANT4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ANT4 siRNA (h): sc-88900, ANT4 siRNA (m): sc-105072, ANT4 shRNA Plasmid (h): sc-88900-SH, ANT4 shRNA Plasmid (m): sc-105072-SH, ANT4 shRNA (h) Lentiviral Particles: sc-88900-V and ANT4 shRNA (m) Lentiviral Particles: sc-105072-V.

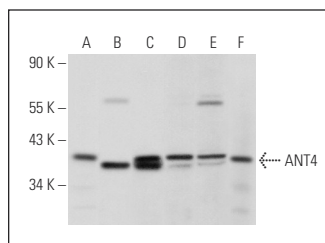
Molecular Weight of ANT4: 35 kDa.

Positive Controls: Hs 181 Tes whole cell lysate: sc-364779, mouse liver extract: sc-2256 or COLO 205 whole cell lysate: sc-364177.

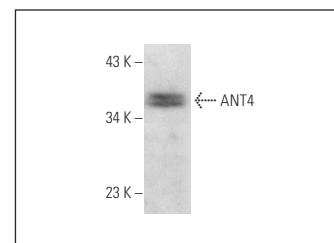
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



ANT4 (A-13): sc-104053. Western blot analysis of ANT4 expression in C6 (A), RAW 264.7 (B), NCI-H460 (C), HUV-EC-C (D) and COLO 205 (E) whole cell lysates and mouse liver tissue extract (F).



ANT4 (A-13): sc-104053. Western blot analysis of ANT4 expression in Hs 181 Tes whole cell lysate.

STORAGE

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

PROTOCOLS

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