

AMAC1 (G-12): sc-102300

BACKGROUND

AMAC1 (acyl-malonyl condensing enzyme 1), also known as TMEM21A (transmembrane protein 21A), is a 338 amino acid multi-pass membrane protein that contains two DUF6 domains and is highly expressed in testis. AMAC1L1, AMAC1L2 and AMAC1L3 are acyl-malonyl condensing enzyme 1-like proteins that, similar to AMAC1, contain DUF6 domains and are present in tissues such as placenta and testis. Human AMAC1 and AMAC1L3 are encoded by genes which map to chromosome 17, while human AMAC1L1 and AMAC1L2 are encoded by genes that map to chromosomes 18 and 8, respectively. Together, chromosomes 8, 17 and 18 encode over 2,300 genes, some of which include the tumor suppressors p53 and BRCA1, as well as genes that are associated with Edwards syndrome, Niemann-Pick disease, Pfeiffer syndrome and congenital hypothyroidism.

REFERENCES

1. Carstea, E.D., et al. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. *Proc. Natl. Acad. Sci. USA* 90: 2002-2004.
2. Wildenauer, D.B., et al. 1999. Chromosomes 8 and 10 workshop. *Am. J. Med. Genet.* 88: 239-243.
3. Appel, S., et al. 2002. Physical and transcriptional map of the critical region for keratolytic winter erythema (KWE) on chromosome 8p22-p23 between D8S550 and D8S1759. *Eur. J. Hum. Genet.* 10: 17-25.
4. Grosso, S., et al. 2005. Chromosome 18 aberrations and epilepsy: a review. *Am. J. Med. Genet. A* 134: 88-94.
5. Nusbaum, C., et al. 2006. DNA sequence and analysis of human chromosome 8. *Nature* 439: 331-335.

SOURCE

AMAC1 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AMAC1 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-102300 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AMAC1 (G-12) is recommended for detection of AMAC1, AMAC1L1, AMAC1L2 and AMAC1L3 of 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).

Molecular Weight of AMAC1: 35 kDa.

STORAGE

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

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.