SANTA CRUZ BIOTECHNOLOGY, INC.

APMAP (T-22): sc-130995

BACKGROUND

APMAP (adipocyte plasma membrane associated protein), also known as BSCv or C20orf3, is a 416 amino acid single-pass type II membrane protein that is ubiquitously expressed in adult and embryonic tissues. During adipocyte differentiation, APMAP translocates from the endoplasmatic reticulum to the plasma membrane and is suggested to exhibit strong arylesterase activity. APMAP belongs to the strictosidine synthase family, exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 20p11.21. The gene encoding C20orf3 maps to human chromosome 20, which houses over 600 genes some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome. Additionally, chromosome 20 contains a region with numerous genes which are thought important for seminal production and may be potential targets for male contraception.

REFERENCES

1. Morita, M., et al. 2000. Genomic construct and mapping of the gene for CMAP (leukocystatin/cystatin F, CST7) and identification of a proximal novel gene, BSCv (C20orf3). Genomics 67: 87-91.
2. Albrektsen, T., et al. 2001. Identification of a novel integral plasma membrane protein induced during adipocyte differentiation. Biochem. J. 359: 393-402.
3. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608642. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Ilhan, A., et al. 2008. Localization and characterization of the novel protein encoded by C20orf3. Biochem. J. 414: 485-495.
5. Bogner-Strauss, J.G., et al. 2010. Reconstruction of gene association network reveals a transmembrane protein required for adipogenesis and targeted by PPARγ. Cell. Mol. Life Sci. 67: 4049-4064.
6. Mekenkamp, L.J., et al. 2013. Chromosome 20p11 gains are associated with liver-specific metastasis in patients with colorectal cancer. Gut 62: 94-101.
7. Mosser, S., et al. 2015. The adipocyte differentiation protein APMAP is an endogenous suppressor of Aβ production in the brain. Hum. Mol. Genet. 24: 371-382.

CHROMOSOMAL LOCATION

Genetic locus: APMAP (human) mapping to 20p11.21; Apmap (mouse) mapping to 2 G3.

SOURCE

APMAP (T-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic APMAP peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

APMAP (T-22) is recommended for detection of APMAP 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for APMAP siRNA (h): sc-72731, APMAP siRNA (m): sc-141869, APMAP shRNA Plasmid (h): sc-72731-SH, APMAP shRNA Plasmid (m): sc-141869-SH, APMAP shRNA (h) Lentiviral Particles: sc-72731-V and APMAP shRNA (m) Lentiviral Particles: sc-141869-V.

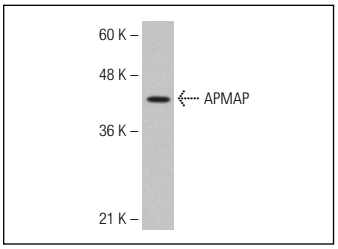
Molecular Weight of APMAP isoforms: 46/32 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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).

DATA



APMAP (T-22): sc-130995. Western blot analysis of APMAP expression in Hep G2 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.

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.