apoL-VI (N-18): sc-86297



The Boures to Overtion

BACKGROUND

The apolipoprotein L gene family maps to a region on chromosome 22 and encodes six highly homologous proteins, designated apoL-I, apoL-II, apoL-III, apoL-IV, apoL-V and apoL-VI, all of which function as components of plasma lipoproteins. ApoL-VI (Apolipoprotein L-VI), also known as APOL6, is a 343 amino acid protein that localizes to the cytoplasm and belongs to the apolipoprotein L family. Expressed in a variety of tissues, including liver, heart, uterus, spleen, colon, spinal cord, placenta, prostate and mammary gland, apoL-VI is thought to affect the movement of lipids in the cytoplasm and may allow the binding of lipids to organelles. Overproduction of apoL-VI induces apoptosis, suggesting that apoL-VI may also be involved in tumor progression. Like other members of the apolipoprotein L family, apoL-VI is thought to be involved in the development of schizophrenia.

REFERENCES

- 1. Dunham, I., et al. 1999. The DNA sequence of human chromosome 22. Nature 402: 489-495.
- 2. Page, N.M., et al. 2001. The human apolipoprotein L gene cluster: identification, classification, and sites of distribution. Genomics 74: 71-78.
- Monajemi, H., et al. 2002. The apolipoprotein L gene cluster has emerged recently in evolution and is expressed in human vascular tissue. Genomics 79: 539-546.
- 4. Mimmack, M.L., et al. 2002. Gene expression analysis in schizophrenia: reproducible upregulation of several members of the apolipoprotein L family located in a high-susceptibility locus for schizophrenia on chromosome 22. Proc. Natl. Acad. Sci. USA 99: 4680-4685.
- 5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607256. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Liu, Z., et al. 2005. Apolipoprotein I6, a novel proapoptotic Bcl-2 homology 3-only protein, induces mitochondria-mediated apoptosis in cancer cells. Mol. Cancer Res. 3: 21-31.
- 7. Liu, Y.L., et al. 2008. RASD2, MYH9, and CACNG2 genes at chromosome 22q12 associated with the subgroup of schizophrenia with non-deficit in sustained attention and executive function. Biol. Psychiatry 64: 789-796.

CHROMOSOMAL LOCATION

Genetic locus: APOL6 (human) mapping to 22q12.3.

SOURCE

apoL-VI (N-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of apoL-VI of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-86297 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

apoL-VI (N-18) is recommended for detection of apoL-VI of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for apoL-VI siRNA (h): sc-72522, apoL-VI shRNA Plasmid (h): sc-72522-SH and apoL-VI shRNA (h) Lentiviral Particles: sc-72522-V.

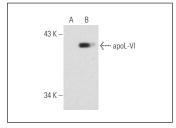
Molecular Weight of apoL-VI: 38 kDa.

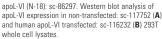
Positive Controls: apoL-VI (h2): 293T Lysate: sc-116232, JAR cell lysate: sc-2276 or HeLa whole cell lysate: sc-2200.

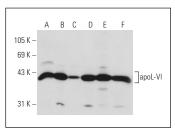
RECOMMENDED SECONDARY REAGENTS

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.

DATA







apoL-VI (N-18): sc-86297. Western blot analysis of apoL-VI expression in JAR (\mathbf{A}), DU 145 (\mathbf{B}), JEG-3 (\mathbf{C}), ECV304 (\mathbf{D}), MES-SA/Dx5 (\mathbf{E}) and HeLa (\mathbf{F}) whole cell lysates.

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.