apoL-V (N-15): sc-86293



The Power to Question

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-V (apolipoprotein L-V), also known as APOL5, is a 433 amino acid protein that localizes to the cytoplasm and belongs to the apolipoprotein L family. Expressed at low levels in stomach, testis, uterus and skeletal muscle, apoL-V is thought to affect the movement of lipids in the cytoplasm and may allow the binding of lipids to organelles. Like other members of the apolipoprotein L family, apoL-V may play a role in the development of schizophrenia.

REFERENCES

- Dunham, I., Shimizu, N., Roe, B.A., Chissoe, S., Hunt, A.R., Collins, J.E., Bruskiewich, R., Beare, D.M., Clamp, M., Smink, L.J., Ainscough, R., Almeida, J.P., Babbage, A., Bagguley, C., Bailey, J., Barlow, K., Bates, K.N., et al. 1999. The DNA sequence of human chromosome 22. Nature 402: 489-495.
- Page, N.M., Butlin, D.J., Lomthaisong, K. and Lowry, P.J. 2001. The human apolipoprotein L gene cluster: identification, classification, and sites of distribution. Genomics 74: 71-78.
- 3. Monajemi, H., Fontijn, R.D., Pannekoek, H. and Horrevoets, A.J. 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., Ryan, M., Baba, H., Navarro-Ruiz, J., Iritani, S., Faull, R.L., McKenna, P.J., Jones, P.B., Arai, H., Starkey, M., Emson, P.C. and Bahn, S. 2002. Gene expression analysis in schizophrenia: reproducible up-regulation 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: 607255. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 6. Liu, Y.L., Fann, C.S., Liu, C.M., Chen, W.J., Wu, J.Y., Hung, S.I., Chen, C.H., Jou, Y.S., Liu, S.K., Hwang, T.J., Hsieh, M.H., Chang, C.C., Yang, W.C., Lin, J.J., Chou, F.H., Faraone, S.V., Tsuang, M.T. and Hwu, H.G. 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: APOL5 (human) mapping to 22q12.3.

SOURCE

apoL-V (N-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of apoL-V of human origin.

STORAGE

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

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-86293 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

apoL-V (N-15) is recommended for detection of apoL-V 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); non cross-reactive with other apoL family members.

Suitable for use as control antibody for apoL-V siRNA (h): sc-72521, apoL-V shRNA Plasmid (h): sc-72521-SH and apoL-V shRNA (h) Lentiviral Particles: sc-72521-V.

Molecular Weight of apoL-V: 47 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) 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.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**