# SANTA CRUZ BIOTECHNOLOGY, INC.

# apoC-III (V-20): sc-23604



#### BACKGROUND

Apolipoproteins are protein components of plasma lipoproteins. The apolipoprotein C gene family encodes four homologous proteins designated apoC-I to -IV, which specifically modulate the metabolism of triglyceride-rich lipoproteins. The human apoC-I gene maps to chromosome 19q13.2 and is expressed primarily in the liver where it is activated when monocytes differentiate into macrophages. The human apoC-II gene maps to chromosome 19q13.2 and encodes a 79 amino acid single chain protein that is a necessary cofactor for the activation of lipoprotein lipase, the enzyme that hydrolyzes triglycerides in plasma and transfers the fatty acids to tissues. The human apoC-III gene maps to chromosome 11q23 and encodes a protein that may delay catabolism of triglyceride-rich particles by inhibiting lipoprotein lipase and hepatic lipase. The human apoC-IV gene maps to chromosome 19q13.2 and encodes a 127 amino acid protein that is primarily expressed in the liver.

#### REFERENCES

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- 3. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 207750. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Jong, M.C. and Havekes, L.M. 2000. Insights into apolipoprotein C metabolism from transgenic and gene-targeted mice. Int J Tissue React 22: 59-66.
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- Kotite, L., Zhang, L.H., Yu, Z., Burlingame, A.L. and Havel, R.J. 2003. Human apoC-IV: isolation, characterization and immunochemical quantification in plasma and plasma lipoproteins. J. Lipid Res. 44: 1387-1394.

#### CHROMOSOMAL LOCATION

Genetic locus: APOC3 (human) mapping to 11q23.3.

#### SOURCE

apoC-III (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of apoC-III of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23604 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

apoC-III (V-20) is recommended for detection of apoC-III 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).

Suitable for use as control antibody for apoC-III siRNA (h): sc-41186, apoC-III shRNA Plasmid (h): sc-41186-SH and apoC-III shRNA (h) Lentiviral Particles: sc-41186-V.

Molecular Weight of apoC-III: 10 kDa.

#### **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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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.

# MONOS

Satisfation Guaranteed

Try **apoC-III (8H7): sc-293227**, our highly recommended monoclonal alternative to apoC-III (V-20).