SANTA CRUZ BIOTECHNOLOGY, INC.

Squalene epoxidase (L-23): sc-134033



BACKGROUND

Several proteins mediate the biosynthesis of cholesterol. The first specific step in the cholesterol biosynthetic pathway is the conversion of transfarnesyl-diphosphate to Squalene, which is catalyzed by the endoplasmic reticulum membrane-associated enzyme Squalene synthetase, also designated Squalene synthase and Farnesyl-diphosphate farnesyltransferase. Squalene synthetase is located at a branch point in the mevalonate pathway and is also involved in isoprenoid biosynthesis. Squalene epoxidase, also designated Squalene monooxygenase, is a multi-pass microsomal membrane-associated enzyme that catalyzes the first oxygenation step in sterol biosynthesis and most likely functions as one of the rate-limiting enzymes in this pathway. Squalene epoxidase may form a complex with Squalene synthetase.

REFERENCES

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- 6. Xu, F., Rychnovsky, S.D., Belani, J.D., Hobbs, H.H., Cohen, J.C. and Rawson, R.B. 2005. Dual roles for cholesterol in mammalian cells. Proc. Nat. Acad. Sci. USA 102: 14551-14556.

CHROMOSOMAL LOCATION

Genetic locus: SQLE (human) mapping to 8q24.13; Sqle (mouse) mapping to 15 D1.

SOURCE

Squalene epoxidase (L-23) is an affinity purified rabbit polyclonal antibody raised against synthetic Squalene epoxidase peptide of human origin.

PRODUCT

Each vial contains 50 > μ g lgG in 500 > μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

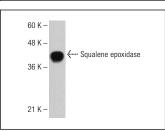
Squalene epoxidase (L-23) is recommended for detection of Squalene epoxidase of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 Squalene epoxidase siRNA (h): sc-61608, Squalene epoxidase siRNA (m): sc-61609, Squalene epoxidase shRNA Plasmid (h): sc-61608-SH, Squalene epoxidase shRNA Plasmid (m): sc-61609-SH, Squalene epoxidase shRNA (h) Lentiviral Particles: sc-61608-V and Squalene epoxidase shRNA (m) Lentiviral Particles: sc-61609-V.

Molecular Weight of Squalene epoxidase: 55 kDa.

Positive Controls: 721 B whole cell lysate

DATA



Squalene enoxidase (L-23): sc-134033 Western blot analysis of Squalene epoxidase expression in 721 B whole cell lysa

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 Squalene epoxidase (H-6): sc-271651, our highly recommended monoclonal alternative to Squalene epoxidase (L-23).