

# Squalene epoxidase (H-300): sc-99144

## 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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## CHROMOSOMAL LOCATION

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

## SOURCE

Squalene epoxidase (H-300) is a rabbit polyclonal antibody raised against amino acids 275-574 mapping at the C-terminus of Squalene epoxidase of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Squalene epoxidase (H-300) is recommended for detection of Squalene epoxidase 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)], 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).

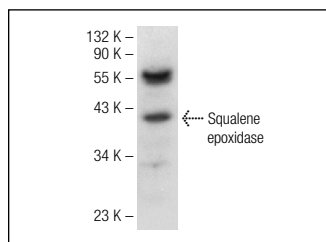
Squalene epoxidase (H-300) is also recommended for detection of Squalene epoxidase in additional species, including canine, bovine and porcine.

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: Hep G2 cell lysate: sc-2227.

## DATA



Squalene epoxidase (H-300): sc-99144. Western blot analysis of Squalene epoxidase 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.

## PROTOCOLS

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Try **Squalene epoxidase (H-6): sc-271651**, our highly recommended monoclonal alternative to Squalene epoxidase (H-300).