

For Research Use Only

# SQLE Polyclonal antibody

Catalog Number: 12544-1-AP

Featured Product

80 Publications



## Basic Information

**Catalog Number:**

12544-1-AP

**Size:**

1000 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG3266

**GenBank Accession Number:**

BC017033

**GeneID (NCBI):**

6713

**UNIPROT ID:**

Q14534

**Full Name:**

squalene epoxidase

**Calculated MW:**

574 aa, 64 kDa

**Observed MW:**

50-64 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:2000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IP, ELISA

**Cited Applications:**

WB, IHC, ChIP, IF

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse, rat, hamster

**Positive Controls:**

WB : A549 cells, HepG2 cells

IP : HepG2 cells,

IHC : human prostate cancer tissue, human breast cancer tissue

IF/ICC : HepG2 cells, PC-3 cells

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

SQLE, also named as ERG1, SE and SM, belongs to the squalene monooxygenase family. It catalyzes the first oxygenation step in cholesterol synthesis, acting on squalene before cyclization into the basic steroid structure. SQLE may serve as a flux-controlling enzyme beyond 3-hydroxy-3-methylglutaryl-coenzyme A reductase (HMGR, considered as rate limiting). It is also posttranslationally regulated by cholesterol-dependent proteasomal degradation. SQLE is subject to feedback regulation via cholesterol-induced degradation, which depends on its lipid-sensing N terminal regulatory domain. Truncation of SQLE occurs during its endoplasmic reticulum-associated degradation and requires the proteasome, which partially degrades the SQLE N-terminus and eliminates cholesterol-sensing elements within this region. The MW of SQLE is about 50-64 kDa. (PMID:21356516, PMID:28972164)

## Notable Publications

Author	Pubmed ID	Journal	Application
Ngee Kiat Chua	31471528	Biochem J	wb
Anke Loregger	28882874	Arterioscler Thromb Vasc Biol	WB
Michael J McKenna	36283413	Mol Cell	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

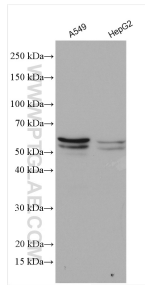
T: 4006900926

E: Proteintech-CN@ptglab.com

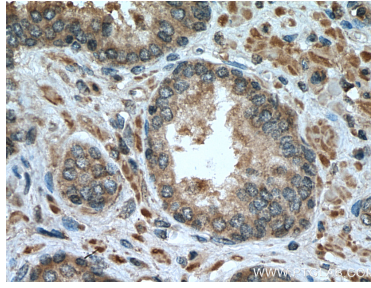
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

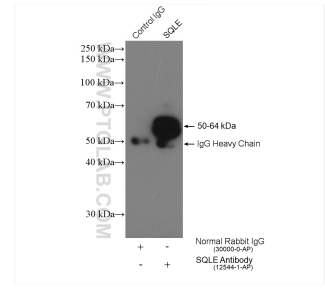
## Selected Validation Data



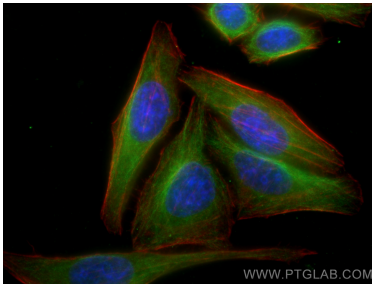
Various lysates were subjected to SDS PAGE followed by western blot with 12544-1-AP (SQLE antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



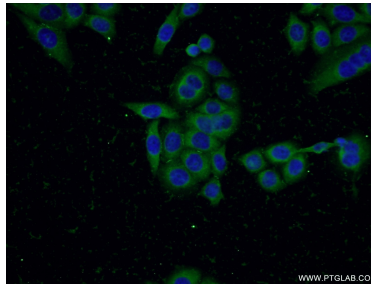
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 12544-1-AP (SQLE antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-SQLE (IP:12544-1-AP, 4ug; Detection:12544-1-AP 1:500) with HepG2 cells lysate 2240 ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using SQLE antibody (12544-1-AP) at dilution of 1:40 and Coralite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunofluorescent analysis of PC-3 cells using 12544-1-AP (SQLE antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).