For Research Use Only

SQLE Monoclonal antibody

Catalog Number:67206-1-lg Featured Product 3 Publications



Basic Information

Catalog Number: 67206-1-lg Source:

Mouse Isotype: IgG2a

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:

Protein A purification

CloneNo.: 1C9A2

Recommended Dilutions:

WB: 1:2000-1:10000 IF/ICC: 1:400-1:1600

Applications

Tested Applications: WB, IF/ICC, ELISA Cited Applications:

WB. IF

Species Specificity: human, rat, pig **Cited Species:** human, mouse

Positive Controls:

WB: A549 cells, HEK-293 cells, HepG2 cells, HSC-T6

cells. LO2 cells

IF/ICC: HEK-293 cells,

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
Yanyan Zhu	40460939	J Adv Res	WB
Jun Wu	37993027	Cell Signal	IF
Xinyuan Zhao	37490552	Adv Sci (Weinh)	WB

Storage

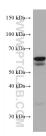
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

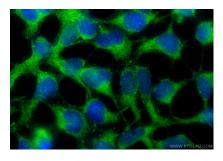
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



A549 cells were subjected to SDS PAGE followed by western blot with 67206-1-lg (SQLE antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using SQLE antibody (67206-1-Ig, Clone: 1C9A2) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).