For Research Use Only

CoraLite® Plus 488-conjugated SQLE Polyclonal antibody



Catalog Number: CL488-12544 Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

CL488-12544 BC017033 GeneID (NCBI):

Nanodrop: **UNIPROT ID:** Q14534 Rabbit Full Name:

100ul, Concentration: 1000 ug/ml by 6713

Isotype: squalene epoxidase IgG Calculated MW: Immunogen Catalog Number: 574 aa, 64 kDa AG3266 Observed MW: 50-64 kDa

Antigen affinity purification Recommended Dilutions: IF/ICC 1:50-1:500 Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Purification Method:

Applications

Tested Applications:

IF/ICC

Species Specificity: human, mouse, rat

Positive Controls:

IF/ICC: HepG2 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)

Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CoraLite® Plus 488 SQLE antibody (CL488-12544) at dilution of 1:200.