

SC5DL Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56628

Specification

SC5DL Polyclonal Antibody - Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	O75845
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SC5DL
Epitope Specificity	201-299/299
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Endoplasmic reticulum membrane; Multipass membrane protein
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

This gene encodes an enzyme of cholesterol biosynthesis. The encoded protein catalyzes the conversion of lathosterol into 7-dehydrocholesterol. Mutations in this gene have been associated with lathosterolosis. Alternatively spliced transcript variants encoding the same protein have been described. [provided by RefSeq, Jul 2008]

SC5DL Polyclonal Antibody - Additional Information

Gene ID 6309

Other Names

Lathosterol oxidase, 1.14.19.20, C-5 sterol desaturase, Delta(7)-sterol 5-desaturase, Delta(7)-sterol C5(6)-desaturase, Lathosterol 5-desaturase, Sterol-C5-desaturase, SC5D (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=10547), SC5DL

Dilution

IHC-P ~ ~ N/A
IHC-F ~ ~ N/A
IF ~ ~ 1:50 ~ 200
ICC ~ ~ N/A
E ~ ~ N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

SC5DL Polyclonal Antibody - Protein Information

Name SC5D ([HGNC:10547](#))

Function

Catalyzes the penultimate step of the biosynthesis of cholesterol, the dehydrogenation of lathosterol into 7- dehydrocholesterol (7-DHC). Cholesterol is the major sterol component in mammalian membranes and a precursor for bile acid and steroid hormone synthesis (PubMed:10786622, PubMed:38297129). In addition to its essential role in cholesterol biosynthesis, it also indirectly regulates ferroptosis through the production of 7-DHC. By diverting the spread of damage caused by peroxyl radicals from the phospholipid components to its sterol nucleus, 7-DHC prevents this form of cell death (PubMed:38297129, PubMed:38297130).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

SC5DL Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SC5DL Polyclonal Antibody - Images