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SC5DL Rabbit pAb

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Catalog # AP56628

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O75845
Predicted	Rat, Pig, Dog, Human, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35301
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]

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 (HGNC:10547)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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.

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

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.