

# SC5DL Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56628

## Product Information

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<b>Application</b>	IHC-P, IHC-F, IF, ICC, E
<b>Primary Accession</b>	<a href="#">O75845</a>
<b>Reactivity</b>	Rat, Pig, Dog
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	35301
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human SC5DL
<b>Epitope Specificity</b>	201-299/299
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Endoplasmic reticulum membrane; Multipass membrane protein
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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

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<b>Gene ID</b>	6309
<b>Other Names</b>	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 ( <a href="#">HGNC:10547</a> ), SC5DL
<b>Dilution</b>	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
<b>Storage</b>	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

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<b>Name</b>	SC5D ( <a href="#">HGNC:10547</a> )
<b>Function</b>	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: <a href="#">10786622</a> , PubMed: <a href="#">38297129</a> ). 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: <a href="#">38297129</a> , PubMed: <a href="#">38297130</a> ).
<b>Cellular Location</b>	Endoplasmic reticulum membrane; Multi-pass membrane protein

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