10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Acetoacetyl-CoA synthetase Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54479

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q86V21
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	75144
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human AACS
Epitope Specificity	182-228/672
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	Cytoplasm, cytosol
SIMILARITY	Belongs to the ATP-dependent AMP-binding enzyme family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	ACSF1 is a 672 amino acid protein belonging to the ATP-dependent AMP-binding enzyme family. Encoded by a gene that maps to human chromosome 12q24.31, ACSF1 is highly expressed in kidney, heart and brain, and shows similar neural expression as HMGCR (3-hydroxy-3-methylglutaryl-CoA reductase). Existing as three alternatively spliced isoforms, ACSF1 participates in ATP binding, ligase activity, acetoacetate-CoA ligase activity and nucleotide binding. The ACSF1 promoter is a known PPAR?target gene, with the nuclear receptor recruited to the ACSF1 promoter by direct interaction with stimulating protein-1 (Sp1). ACSF1 activates acetoacetate and is highly regulated by modulators that affect HMGCR and cholesterol biosynthesis.

Additional Information

Gene ID	65985
Other Names	Acetoacetyl-CoA synthetase, 6.2.1.16, Acyl-CoA synthetase family member 1, Protein sur-5 homolog, AACS, ACSF1
Target/Specificity	Highly expressed in kidney, heart and brain, but low in liver.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

Protein Information

Name	AACS
Synonyms	ACSF1
Function	Converts acetoacetate to acetoacetyl-CoA in the cytosol (By similarity). Ketone body-utilizing enzyme, responsible for the synthesis of cholesterol and fatty acids (By similarity).
Cellular Location	Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9JMI1}
Tissue Location	Highly expressed in kidney, heart and brain, but low in liver.