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

Acetoacetyl-CoA synthetase Rabbit pAb

Acetoacetyl-CoA synthetase Rabbit pAb
Catalog # AP54479

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q86V21
Predicted	Human, Mouse, Rat, Chicken, Dog, Pig, Horse, Sheep
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/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	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.

Background

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.