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Datasheet for ABIN7317651 AACS Protein (His tag)

Overview

Quantity:	100 µg
Target:	AACS
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AACS protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human AACS/Acetoacetyl-CoA Synthetase Protein (His Tag)
Sequence:	Met 1-Phe 672
Characteristics:	A DNA sequence encoding the full length of human AACS isoform a (NP_076417.2) (Met 1-Phe 672) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 96 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	AACS
Alternative Name:	AACS/Acetoacetyl-CoA Synthetase (AACS Products)
Background:	Background: Acetoacetyl-CoA Synthetase (AACS) is a novel cytosolic ketone body (acetoacetate)-specific ligase. The AACS in adipose tissue plays an important role in utilizing ketone body for the fatty acid-synthesis during adipose tissue development. It had been

Target Details

improved that Acetoacetyl-CoA Synthetase is an essential enzyme for the synthesis of fatty acid and cholesterol from ketone bodies, was found to be highly expressed in mouse adipose tissue, and GC box and C/EBPs motif were crucial for AACs promoter activity in 3T3-L1 adipocytes. Moreover, AACs promoter activity was controlled mainly by C/EBPalpha during adipogenesis. AACs gene expression is particularly abundant in white adipose tissue, as it is induced during adipocyte differentiation. The human AACs promoter is a PPARgamma target gene and that this nuclear receptor is recruited to the AACs promoter by direct interaction with Sp1 (stimulating protein-1). The Acetoacetyl-CoA Synthetase has important roles in the regulation of ketone body utilization in rat liver and that these hypocholesterolemic agents have the ability to remedy the impaired utilization of ketone bodies under the diabetic condition.

Synonym: ACSF1,SUR-5

Molecular Weight: 77 kDa

NCBI Accession: [NP_076417](#)

Pathways: [Positive Regulation of Peptide Hormone Secretion](#), [Carbohydrate Homeostasis](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.