

Recombinant Human AACS / Acetoacetyl-CoA Synthetase Protein (His tag)

Cat.NO.: TP06587

3th Edition

Synonyms:ACSF1;SUR-5

Description: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 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.

Form:PBS

Molecular Weight:77 kDa

Sequences:Met 1-Phe 672

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.