ACSS2 Protein, Human

Cat. No.:	HY-P701922
Synonyms:	ACSS2; Acetyl-coenzyme A synthetase; cytoplasmic; Acetate--CoA ligase; Acetyl-CoA synthetase; ACS; AceCS; Acetyl-CoA synthetase 1; AceCS1; Acyl-CoA synthetase short-chain family member 2; Acyl-activating enzyme; Propionate--CoA ligase
Species:	Human
Source:	E. coli
Accession:	Q9NR19 (G2-Q701)
Gene ID:	55902
Molecular Weight:	Approximately 78.6 kDa

PROPERTIES

Appearance	Solution
Formulation	Supplied as a 0.22 μm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol, 1 mM DTT.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice

DESCRIPTION

Background	ACSS2 (Acetyl-CoA synthetase 2) is an enzyme that plays a crucial role in cellular metabolism by catalyzing the synthesis of acetyl-CoA from short-chain fatty acids. Acetate is the preferred substrate for ACSS2, and it efficiently converts acetate into acetyl-CoA. This enzymatic activity is pivotal for various cellular processes, including energy production, lipid metabolism, and histone acetylation. ACSS2 can also utilize propionate, albeit with a much lower affinity compared to acetate. The ability of ACSS2 to generate acetyl-CoA from short-chain fatty acids contributes to the pool of acetyl-CoA available for diverse metabolic pathways, emphasizing its importance in cellular energy homeostasis and the integration of metabolic signals.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA