

ACSS1 (Acetyl-K642) Polyclonal Antibody
Catalog # AP63282**Specification****ACSS1 (Acetyl-K642) Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	O9NUB1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

ACSS1 (Acetyl-K642) Polyclonal Antibody - Additional Information**Gene ID** 84532**Other Names**

Acetyl-coenzyme A synthetase 2-like, mitochondrial (EC 6.2.1.1) (Acetate--CoA ligase 2) (Acetyl-CoA synthetase 2) (AceCS2) (Acyl-CoA synthetase short-chain family member 1)

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

ACSS1 (Acetyl-K642) Polyclonal Antibody - Protein Information**Name** ACSS1**Synonyms** ACAS2L, KIAA1846**Function**

Catalyzes the synthesis of acetyl-CoA from short-chain fatty acids (PubMed:16788062). Acetate is the preferred substrate (PubMed:16788062). Can also utilize propionate with a much lower affinity (By similarity). Provides acetyl-CoA that is utilized mainly for oxidation under ketogenic conditions (By similarity). Involved in thermogenesis under ketogenic conditions, using acetate as a vital fuel when carbohydrate availability is insufficient (By similarity).

Cellular Location

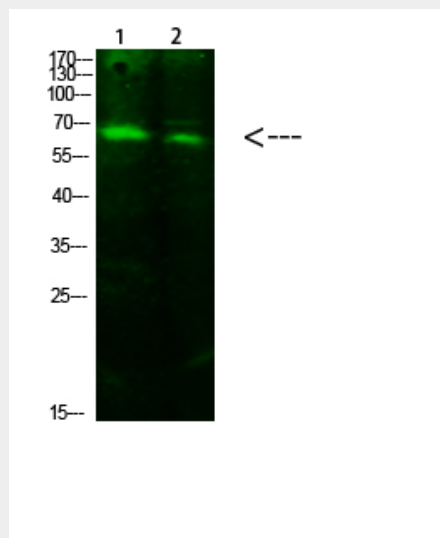
Mitochondrion matrix

ACSS1 (Acetyl-K642) Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

ACSS1 (Acetyl-K642) Polyclonal Antibody - Images



Western Blot analysis of 1,293T 2, hela cells using primary antibody diluted at 1:1000 (4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour)

ACSS1 (Acetyl-K642) Polyclonal Antibody - Background

Important for maintaining normal body temperature during fasting and for energy homeostasis. Essential for energy expenditure under ketogenic conditions (By similarity). Converts acetate to acetyl-CoA so that it can be used for oxidation through the tricarboxylic cycle to produce ATP and CO₂.