

# ACSS1 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP22196a

## Product Information

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|                   |                        |
|-------------------|------------------------|
| Application       | WB, E                  |
| Primary Accession | <a href="#">Q9NUB1</a> |
| Reactivity        | Human, Mouse           |
| Predicted         | Bovine, Canine, Rabbit |
| Host              | Rabbit                 |
| Clonality         | polyclonal             |
| Isotype           | Rabbit IgG             |
| Clone Names       | RB55127                |
| Calculated MW     | 74857                  |

## Additional Information

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|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 84532                                                                                                                                                                                         |
| Other Names        | Acetyl-coenzyme A synthetase 2-like, mitochondrial, 6.2.1.1, Acetate--CoA ligase 2, Acetyl-CoA synthetase 2, AceCS2, Acyl-CoA synthetase short-chain family member 1, ACSS1, ACAS2L, KIAA1846 |
| Target/Specificity | This ACSS1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 94-125 amino acids from human ACSS1.                                                 |
| Dilution           | WB~~1:2000 E~~Use at an assay dependent concentration.                                                                                                                                        |
| Format             | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.                  |
| Storage            | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.                                                       |
| Precautions        | ACSS1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.                                                                                     |

## Protein Information

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|----------|--------------------------------------------------------------------|
| 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

## Background

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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 CO(2).

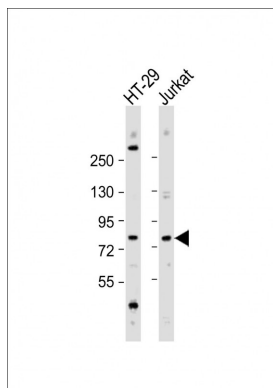
## References

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Deloukas P.,et al.Nature 414:865-871(2001).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Nagase T.,et al.DNA Res. 8:85-95(2001).  
Nakajima D.,et al.DNA Res. 9:99-106(2002).

## Images

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All lanes : Anti-ACSS1 Antibody (N-Term) at 1:2000 dilution Lane 1: HT-29 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 75 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.