

# ACSS1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP53283

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">Q9NUB1</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	74857

## Additional Information

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<b>Gene ID</b>	84532
<b>Other Names</b>	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
<b>Target/Specificity</b>	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ACSS1. The exact sequence is proprietary.
<b>Dilution</b>	WB~~ 1:1000
<b>Format</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol
<b>Storage</b>	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

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<b>Name</b>	ACSS1
<b>Synonyms</b>	ACAS2L, KIAA1846
<b>Function</b>	Catalyzes the synthesis of acetyl-CoA from short-chain fatty acids (PubMed: <a href="#">16788062</a> ). Acetate is the preferred substrate (PubMed: <a href="#">16788062</a> ). 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).
<b>Cellular Location</b>	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<sub>2</sub>.

## References

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Ota T., et al. *Nat. Genet.* 36:40-45(2004).

Deloukas P., et al. *Nature* 414:865-871(2001).

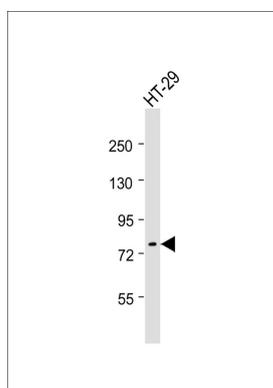
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

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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Anti-ACSS1 Antibody at 1:1000 dilution + HT-29 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% NFDN/TBST.

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