

ACSS1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP53283**Specification**

ACSS1 Antibody - Product Information

Application	WB
Primary Accession	O9NUB1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	75 KDa
Antigen Region	614-663

ACSS1 Antibody - Additional Information**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

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ACSS1. The exact sequence is proprietary.

Dilution

WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol

Storage

Store at -20 °C.Stable for 12 months from date of receipt

ACSS1 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

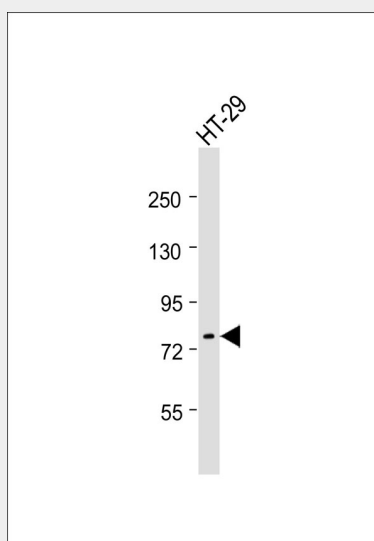
Mitochondrion matrix

ACSS1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ACSS1 Antibody - Images



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% NFDM/TBST.

ACSS1 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.

ACSS1 Antibody - References

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).