

**ACSS2 Rabbit mAb**  
**Catalog # AP75029****Specification**

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**ACSS2 Rabbit mAb - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q9NR19</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>78580</b>

**ACSS2 Rabbit mAb - Additional Information****Gene ID** 55902**Other Names**  
ACSS2**Dilution**  
WB~~1/500-1/1000**Format**  
Liquid**ACSS2 Rabbit mAb - Protein Information****Name** ACSS2**Synonyms** ACAS2**Function**

Catalyzes the synthesis of acetyl-CoA from short-chain fatty acids (PubMed:<a href="http://www.uniprot.org/citations/10843999" target="\_blank">10843999</a>, PubMed:<a href="http://www.uniprot.org/citations/28003429" target="\_blank">28003429</a>, PubMed:<a href="http://www.uniprot.org/citations/28552616" target="\_blank">28552616</a>). Acetate is the preferred substrate (PubMed:<a href="http://www.uniprot.org/citations/10843999" target="\_blank">10843999</a>, PubMed:<a href="http://www.uniprot.org/citations/28003429" target="\_blank">28003429</a>). Can also utilize propionate with a much lower affinity (By similarity). Nuclear ACSS2 promotes glucose deprivation-induced lysosomal biogenesis and autophagy, tumor cell survival and brain tumorigenesis (PubMed:<a href="http://www.uniprot.org/citations/28552616" target="\_blank">28552616</a>). Glucose deprivation results in AMPK-mediated phosphorylation of ACSS2 leading to its translocation to the nucleus where it binds to TFEB and locally produces acetyl-CoA for histone acetylation in the promoter regions of TFEB target genes thereby activating their transcription (PubMed:<a href="http://www.uniprot.org/citations/28552616" target="\_blank">28552616</a>). The regulation of genes associated with autophagy and lysosomal activity through ACSS2 is important for brain tumorigenesis and tumor survival (PubMed:<a href="http://www.uniprot.org/citations/28552616" target="\_blank">28552616</a>).

<http://www.uniprot.org/citations/28552616>>28552616</a>). Acts as a chromatin-bound transcriptional coactivator that up-regulates histone acetylation and expression of neuronal genes (By similarity). Can be recruited to the loci of memory-related neuronal genes to maintain a local acetyl-CoA pool, providing the substrate for histone acetylation and promoting the expression of specific genes, which is essential for maintaining long-term spatial memory (By similarity).

#### Cellular Location

Cytoplasm, cytosol. Cytoplasm {ECO:0000250|UniProtKB:Q9QXG4}. Nucleus Note=Glucose deprivation results in its AMPK-dependent phosphorylation and subsequent nuclear translocation (PubMed:28552616). Phosphorylation at Ser-659, leads to exposure of its nuclear localization signal which is required for its interaction with KPNA1 and subsequent translocation to the nucleus (PubMed:28552616). Found in the cytoplasm in undifferentiated neurons and upon differentiation, translocates to nucleus (By similarity). {ECO:0000250|UniProtKB:Q9QXG4, ECO:0000269|PubMed:28552616}

#### ACSS2 Rabbit mAb - 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](#)

#### ACSS2 Rabbit mAb - Images

