

**DATASHEET**

**ACAS2 Rabbit Polyclonal Antibody**

CAT. NO. APA13279

**KEY FEATURES**

Target	ACAS2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

Catalyzes the synthesis of acetyl-CoA from short-chain fatty acids . Acetate is the preferred substrate . Can also utilize propionate with a much lower affinity . Nuclear ACSS2 promotes glucose deprivation-induced lysosomal biogenesis and autophagy, tumor cell survival and brain tumorigenesis . 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 . The regulation of genes associated with autophagy and lysosomal activity through ACSS2 is important for brain tumorigenesis and tumor survival .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to ACAS2
Specificity	Recognizes endogenous levels of ACAS2 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human ACAS2
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 78; Observed: 78 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	ACAS2; Acetyl-coenzyme A synthetase, cytoplasmic; Acetate--CoA ligase; Acetyl-CoA synthetase; ACS; AceCS; Acyl-CoA synthetase short-chain family member 2; Acyl-activating enzyme
Gene Symbol	ACSS2
Entrez Gene	55902(Human); 60525(Mouse)
SwissProt	Q9NR19(Human); Q9QXG4(Mouse)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

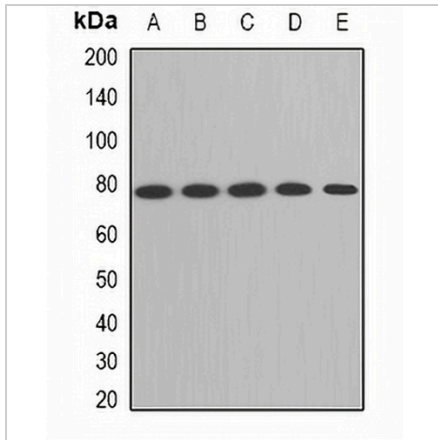
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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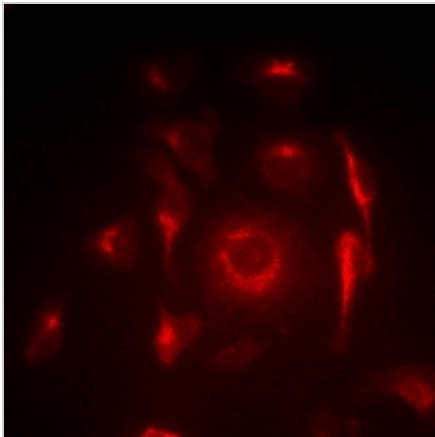
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**DATA**



Western blot analysis of ACAS2 expression in HepG2 (A), SW620 (B), mouse liver (C), mouse kidney (D), rat brain (E) whole cell lysates. (Predicted band size: 78; 80 kD; Observed band size: 78 kD)



Immunofluorescent analysis of ACAS2 staining in SW620 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.