

DATASHEET

ACAS2 Rabbit Monoclonal Antibody(C1179)

CAT. NO. AMA00791

KEY FEATURES

Target	ACAS2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA 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
IHC	1:50 - 1:200

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

PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to ACAS2
Specificity	Recognizes endogenous levels of ACAS2 protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human ACAS2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 78 kD; Observed: 79 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA 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 or your local distributor.

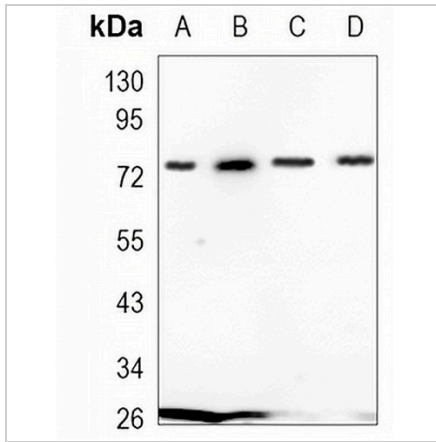
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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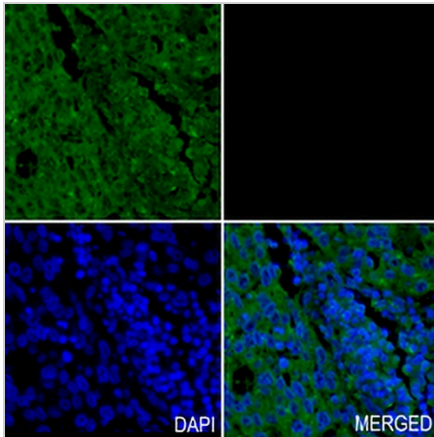
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Western blot analysis of ACAS2 expression in MCF7 (A), mouse liver (B), mouse muscle (C), rat liver (D) whole cell lysates. (Predicted band size: 78 kD; Observed band size: 79 kD)



Immunohistochemical analysis of ACAS2 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. Tyramide-AREX® Fluor 488 (green) was used as the chromogen. The section was then counterstained with DAPI (blue).

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.