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KD-Validated Anti-ACSL4 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1150

Product Information

Application	WB, FC, ICC
Primary Accession	O60488
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB2960
Calculated MW	79188
Gene Name	ACSL4
Aliases	ACSL4; Acyl-CoA Synthetase Long Chain Family Member 4; LACS4; ACS4; FACL4; Fatty-Acid-Coenzyme A Ligase, Long-Chain 4; Long-Chain Fatty-Acid-Coenzyme A Ligase 4; Long-Chain-Fatty-Acid--CoA Ligase 4; Long-Chain Acyl-CoA Synthetase 4; Lignoceroyl-CoA Synthase; Arachidonate--CoA Ligase; EC 6.2.1.3; MRX63; MRX68; Mental Retardation, X-Linked 63; Mental Retardation, X-Linked 68; Acyl-CoA Synthetase 4; EC 6.2.1.15; XLID63; LACS 4
Immunogen	A synthesized peptide derived from ACSL4

Additional Information

Gene ID	2182
Other Names	Long-chain-fatty-acid--CoA ligase 4, 6.2.1.3, Arachidonate--CoA ligase, 6.2.1.15, Long-chain acyl-CoA synthetase 4, LACS 4, ACSL4, ACS4, FACL4, LACS4

Protein Information

Name	ACSL4
Synonyms	ACS4, FACL4, LACS4
Function	Catalyzes the conversion of long-chain fatty acids to their active form acyl-CoA for both synthesis of cellular lipids, and degradation via beta-oxidation (PubMed:21242590, PubMed:22633490, PubMed:24269233, PubMed:31061331, PubMed:38720107). Preferentially activates arachidonate and eicosapentaenoate as substrates (PubMed:21242590). Preferentially activates 8,9-EET > 14,15-EET > 5,6- EET > 11,12-EET (PubMed:21242590). Modulates glucose-stimulated insulin secretion by regulating the levels of unesterified EETs (By similarity). Modulates prostaglandin E2 secretion (PubMed:21242590). Acts as an activator of ferroptosis by activating polyunsaturated fatty acids, especially arachidonate and adrenate, to their active form, generating the primary lipid-peroxidation substrates that contribute to ferroptosis (PubMed:27842070, PubMed:35027735,

PubMed:38720107).

Cellular Location	Mitochondrion outer membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein. Cell membrane; Single-pass type III membrane protein

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.