

For Research Use Only

CRLS1 Polyclonal antibody

Catalog Number: 51055-1-AP **2 Publications**



Basic Information

Catalog Number: 51055-1-AP	GenBank Accession Number: BC069010	Purification Method: Antigen affinity purification
Size: 300 µg/ml	GeneID (NCBI): 54675	Recommended Dilutions: WB 1:200-1:1000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q9UJA2	
Isotype: IgG	Full Name: cardiolipin synthase 1	
	Calculated MW: 301 aa, 32 kDa	
	Observed MW: 50 kDa	

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls: WB : mouse heart tissue, IHC : human heart tissue, human breast cancer tissue, mouse heart tissue
Cited Applications: WB	
Species Specificity: human, mouse	
Cited Species: mouse	

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Cardiolipin (CL) is a mitochondrial specific double negatively charged phospholipid which is intricately involved in regulating bioenergetic efficiency. In eukaryotes, CL is synthesized by cardiolipin synthase (CRLS1 or CLS1) which catalyzes the reversible phosphatidyl group transfer from one phosphatidylglycerol molecule to another to form CL and glycerol. Recently it has been reported that transgenic expression of CRLS1 accelerates cardiolipin remodeling, improves mitochondrial function, modulates mitochondrial signaling, and attenuates mitochondrial dysfunction during diabetes, thereby identifying CRLS1 as a novel therapeutic target to attenuate mitochondrial dysfunction in diabetic myocardium. The predicted molecular weight of CRLS1 is around 32-35 kDa, while a 50 kDa protein with CRLS1 activity had been observed in liver isolation, which may represent an isoform of CRLS1 (20652826).

Notable Publications

Author	Pubmed ID	Journal	Application
Li Chen	35313046	Hepatology	WB
Hongming Su	37872178	Nat Commun	WB

Storage

Storage:
Store at -20°C.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

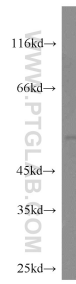
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E: Proteintech-CN@ptglab.com

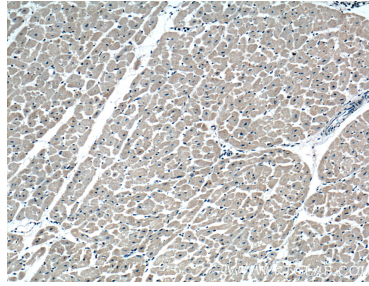
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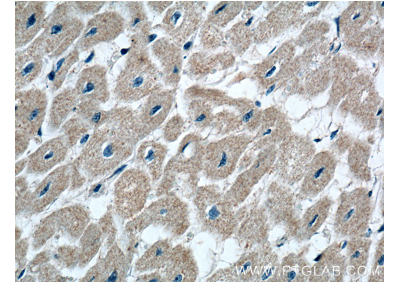
Selected Validation Data



mouse heart tissue were subjected to SDS PAGE followed by western blot with 51055-1-AP (CRLS1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 51055-1-AP (CRLS1 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 51055-1-AP (CRLS1 Antibody) at dilution of 1:200 (under 40x lens).