

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: 150ul, Concentration: 300 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 54675	Recommended Dilutions: WB 1:200-1:1000 IHC 1:50-1:500
Source: Rabbit	Full Name: cardiolipin synthase 1	
Isotype: IgG	Calculated MW: 301 aa, 32 kDa	
	Observed MW: 50 kDa	

Applications

Tested Applications:
IHC, WB, ELISA

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

Positive Controls:

WB: mouse heart tissue,

IHC: human heart tissue, human breast cancer tissue, mouse heart tissue

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

*** 20ul sizes contain 0.1% BSA

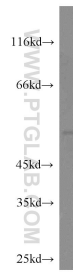
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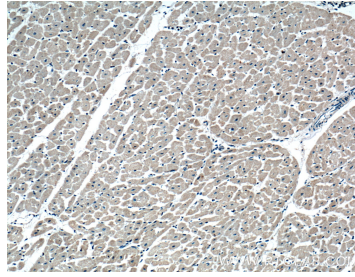
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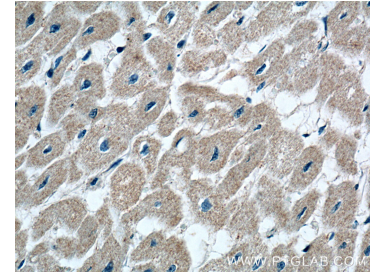
Selected Validation Data



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).