

For Research Use Only

CRLS1-Specific Polyclonal antibody



Catalog Number: 14845-1-AP

Featured Product

10 Publications

Basic Information

Catalog Number: 14845-1-AP	GenBank Accession Number: NM_019095	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 400 µg/ml by Nanodrop and 300 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 54675	Recommended Dilutions: WB 1:500-1:3000 IHC 1:50-1:500
Source: Rabbit	Full Name: cardiolipin synthase 1	
Isotype: IgG	Calculated MW: 33 kDa	
	Observed MW: 32 kDa	

Applications

Tested Applications:
IHC, WB, ELISA

Cited Applications:
WB

Species Specificity:
human

Cited Species:
human, rat, 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: A549 cells, HEK-293T cells, HepG2 cells, Jurkat cells

IHC: human heart tissue, human liver cancer tissue, human skeletal muscle 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
Laure Peyta	26327596	Biochim Biophys Acta	WB
Lei Wu	33129969	J Nutr Biochem	WB
Mushfiquddin Khan	34100455	Neural Regen Res	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

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

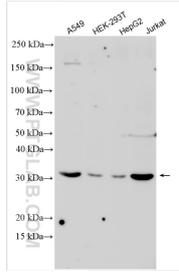
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

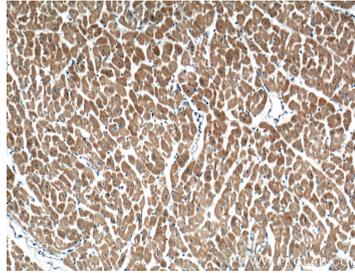
E: proteintech@ptglab.com
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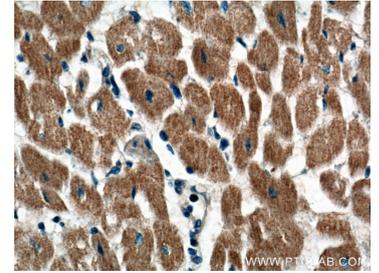
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 14845-1-AP (CRLS1-Specific antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 14845-1-AP (CRLS1-Specific Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 14845-1-AP (CRLS1-Specific Antibody) at dilution of 1:200 (under 40x lens).