

For Research Use Only

Sam50 Polyclonal antibody

Catalog Number: 20824-1-AP

Featured Product

8 Publications



Basic Information

Catalog Number:

20824-1-AP

Size:

150ul, Concentration: 160 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG14799

GenBank Accession Number:

BC007830

GeneID (NCBI):

25813

UNIPROT ID:

Q9Y512

Full Name:

sorting and assembly machinery component 50 homolog (S. cerevisiae)

Calculated MW:

469 aa, 52 kDa

Observed MW:

52 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IHC 1:20-1:200

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IF, IHC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig

Positive Controls:

WB: HEK-293 cells, A431 cells, A375 cells, mouse ovary tissue, mouse kidney tissue

IHC: human hepatocirrhosis tissue, human skin tissue

IF/ICC: HeLa cells,

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

Sam50, encoded by the SAMM50 gene, is an essential protein of the mitochondrial outer membrane (OMM). It contains a beta-barrel domain conserved from bacteria to man (PMID: 14570913). Sam50 is a part of the sorting and assembly machinery (SAM) necessary for the assembly of beta-barrel proteins in the OMM (PMID: 22252321). It is crucial for maintaining mitochondrial shape, morphology of mitochondrial cristae, and assembly of the mitochondrial respiratory chain complexes (PMID: 26587038; 22252321; 25781180). Polymorphisms in the SAMM50 gene have been associated with development and progression of nonalcoholic fatty liver disease (PMID: 23535911).

Notable Publications

Author	Pubmed ID	Journal	Application
Run-Qing Xue	31553938	Free Radic Biol Med	WB
Virginia Guarani	25997101	Elife	WB
Run-Qing Xue	30633969	Free Radic Biol Med	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

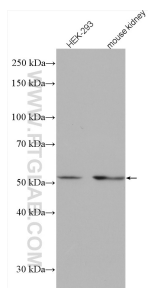
For technical support and original validation data for this product please contact:

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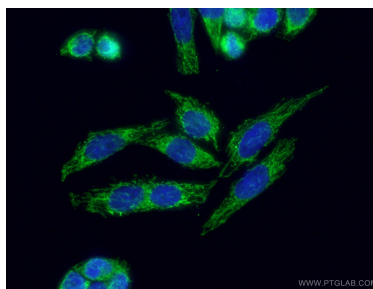
E: proteintech@ptglab.com
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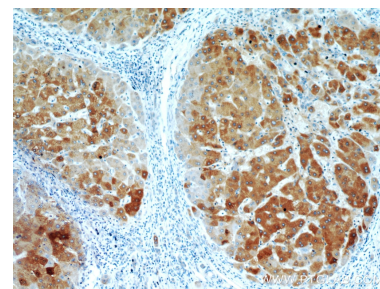
Selected Validation Data



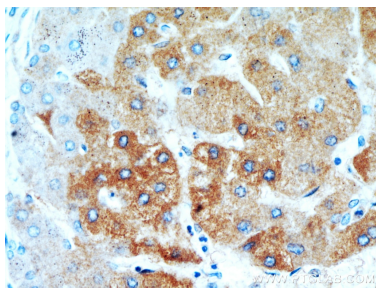
Various lysates were subjected to SDS PAGE followed by western blot with 20824-1-AP (Sam50 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 20824-1-AP (Sam50 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 20824-1-AP (Sam50 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 20824-1-AP (Sam50 antibody) at dilution of 1:100 (under 40x lens).