

For Research Use Only

Sam50 Polyclonal antibody

Catalog Number:20824-1-AP

Featured Product

8 Publications



Basic Information

Catalog Number: 20824-1-AP	GenBank Accession Number: BC007830	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 160 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 25813	Recommended Dilutions: WB 1:500-1:1000 IHC 1:20-1:200 IF/ICC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q9Y512	
Isotype: IgG	Full Name: sorting and assembly machinery component 50 homolog (S. cerevisiae)	
Immunogen Catalog Number: AG14799	Calculated MW: 469 aa, 52 kDa	
	Observed MW: 52 kDa	

Applications

Tested Applications: WB, IF, IHC, ELISA	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,
Cited Applications: WB, IF	
Species Specificity: human, mouse, rat	
Cited Species: human, mouse, rat, pig	

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

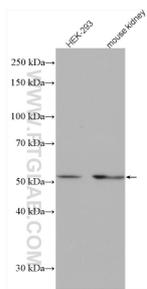
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

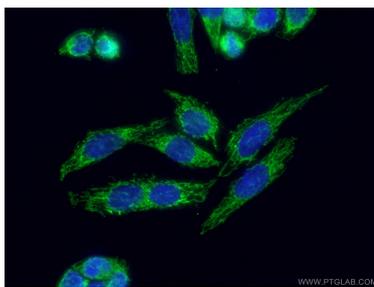
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

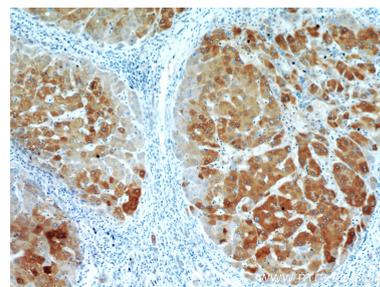
Selected Validation Data



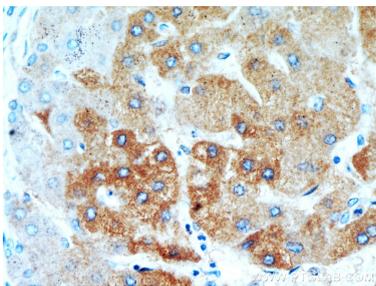
Various lysates were subjected to SDS PAGE followed by western blot with 20824-1-AP (Sam50 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



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).