

For Research Use Only

Sam50 Polyclonal antibody

Catalog Number: 28679-1-AP **2 Publications**



Basic Information

Catalog Number: 28679-1-AP	GenBank Accession Number: BC007830	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 900 µg/ml by Nanodrop and 400 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 25813	Recommended Dilutions: WB 1:2000-1:16000 IHC 1:50-1:500 IF 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: AG29152	Calculated MW: 469 aa, 52 kDa	
	Observed MW: 52 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : A431 cells, HeLa cells, HepG2 cells, mouse heart tissue, rat heart tissue IHC : human heart tissue, human liver cancer tissue IF : HeLa cells,
Cited Applications: IF, WB	
Species Specificity: Human, Mouse, Rat	
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

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
Ran Xu	34631840	Front Cardiovasc Med	IF
Ting Li	38250156	Int J Biol Sci	WB

Storage

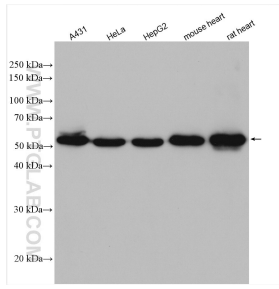
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

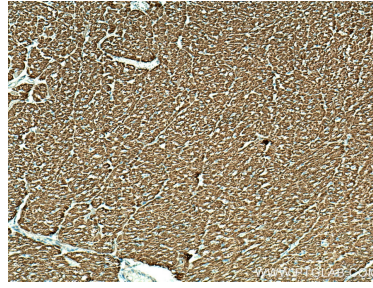
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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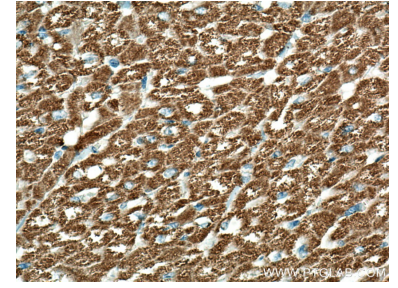
Selected Validation Data



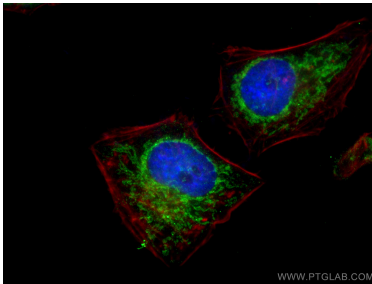
A431 cells were subjected to SDS PAGE followed by western blot with 28679-1-AP (SAMM50 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 28679-1-AP (Sam50 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 28679-1-AP (Sam50 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 28679-1-AP (Sam50 antibody), at dilution of 1:200 and CoralLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).