

For Research Use Only

Sam50 Monoclonal antibody

Catalog Number: 67425-1-Ig



Basic Information

Catalog Number:

67425-1-Ig

Size:

1700 µg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG15155

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:

Protein A purification

CloneNo.:

2H6H9

Recommended Dilutions:

WB 1:1000-1:5000

IHC 1:50-1:500

IF 1:200-1:800

Applications

Tested Applications:

IF/ICC, IHC, WB, ELISA

Species Specificity:

Human, Pig, Rat, Mouse, rabbit

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: A375 cells, rabbit heart tissue, HSC-T6 cells, NIH/3T3 cells, pig heart tissue, rat heart tissue, mouse heart tissue

IHC: human liver cancer tissue, human heart tissue

IF: HeLa cells, HepG2 cells

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).

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

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

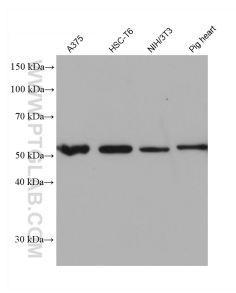
T: 4006900926

E: Proteintech-CN@ptglab.com

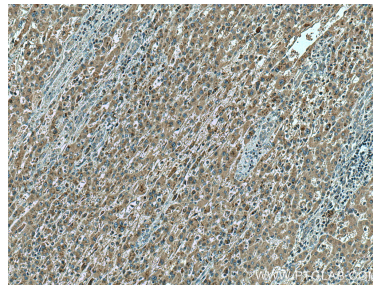
W: ptgcn.com

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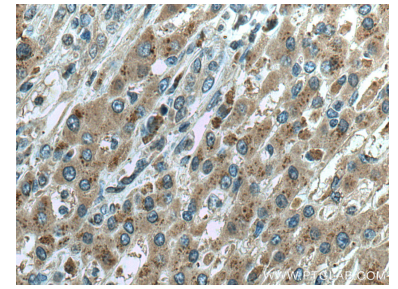
Selected Validation Data



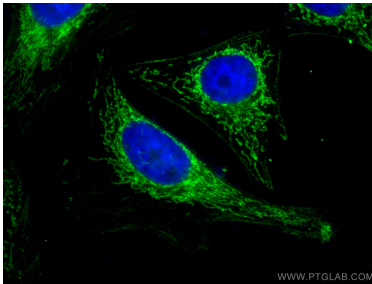
Various lysates were subjected to SDS PAGE followed by western blot with 67425-1-Ig (Sam50 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67425-1-Ig (SAMM50 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 liver cancer tissue slide using 67425-1-Ig (SAMM50 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 Sam50 antibody (67425-1-Ig, Clone: 2H6H9) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).