For Research Use Only

Sam50 Monoclonal antibody

Catalog Number:67425-1-lg 1 Publications



Purification Method:

CloneNo.:

2H6H9

Protein G purification

Recommended Dilutions:

IF/ICC 1:200-1:800

Basic Information

Catalog Number: GenBank Accession Number:

67425-1-lg BC007830
Size: Genel D (NCBI):

150ul , Concentration: 1700 ug/ml by 25813 Nanodrop and 1000 ug/ml by Bradford_{UNIPROT ID}: method using BSA as the standard; Q9Y512

Source: Full Name:

Mouse sorting and assembly machinery lsotype: component 50 homolog (S.

IgG1 cerevisiae)

Immunogen Catalog Number:Calculated MW:AG15155469 aa, 52 kDaObserved MW:

52 kDa

Applications

Tested Applications:

IF/ICC, ELISA

Cited Applications:

IF

Species Specificity:

human
Cited Species:
mouse

Positive Controls:

IF/ICC: 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).

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-------------|-----------|------------------|-------------|
| Renming Fan | 38572099 | Acta Pharm Sin B | IF |

Storage

Storage:

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

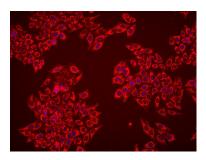
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

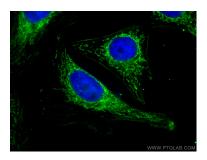
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Sam50 antibody (67425-1-1g, Clone: 2H6H9) at dilution of 1:1500 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Sam50 antibody (67425-1-lg, Clone: 2H6H9) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).