

IMMT Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2931c

Specification

IMMT Antibody (Center) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	O16891
Other Accession	O3KR86 , O8CAQ8
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	83678
Antigen Region	438-467

IMMT Antibody (Center) - Additional Information

Gene ID 10989

Other Names

MICOS complex subunit MIC60, Cell proliferation-inducing gene 4/52 protein, Mitochondrial inner membrane protein, Mitofilin, p87/89, IMMT, HMP, MIC60, MINOS2

Target/Specificity

This IMMT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 438-467 amino acids from the Central region of human IMMT.

Dilution

WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

IMMT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

IMMT Antibody (Center) - Protein Information

Name IMMT

Synonyms HMP, MIC60, MINOS2

Function Component of the MICOS complex, a large protein complex of the mitochondrial inner membrane that plays crucial roles in the maintenance of crista junctions, inner membrane architecture, and formation of contact sites to the outer membrane (PubMed:[22114354](#), PubMed:[25781180](#), PubMed:[32567732](#), PubMed:[33130824](#)). Plays an important role in the maintenance of the MICOS complex stability and the mitochondrial cristae morphology (PubMed:[22114354](#), PubMed:[25781180](#), PubMed:[32567732](#), PubMed:[33130824](#)).

Cellular Location

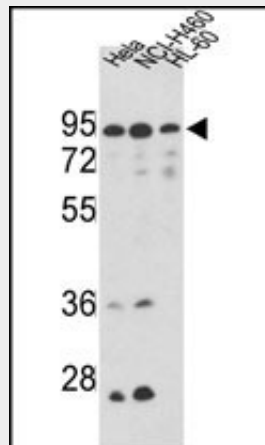
Mitochondrion inner membrane; Single-pass membrane protein. Mitochondrion

IMMT Antibody (Center) - Protocols

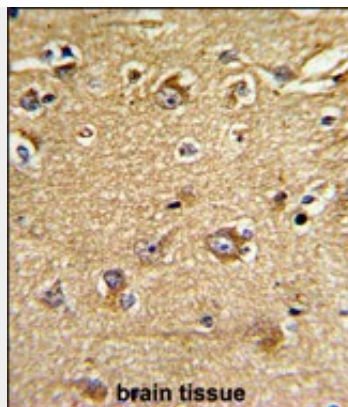
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

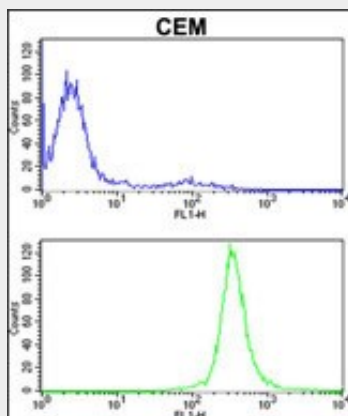
IMMT Antibody (Center) - Images



Western blot analysis of IMMT Antibody (Center) (Cat. #AP2931c) in HeLa, NCI-H460, CEM cell line lysates (35ug/lane). IMMT (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with IMMT Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



IMMT Antibody (Center) (Cat. #AP2931c) flow cytometric analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

IMMT Antibody (Center) - Background

Mitochondria are the center of cellular energy production and essential metabolic reactions. As double membrane-bound organelles, mitochondria from different species, tissues, and metabolic states are highly polymorphic in nature, yet exhibit common structural features. The ultrastructural variations in mitochondrial architecture occur mainly due to the differences in the amount and shape of cristae. Abundant cristae are found in mitochondria from tissues where energy demand is high. Analysis of the human heart mitochondrial proteome shows that mitofilin is one of the most abundant mitochondrial proteins. It appears to play an important role in the maintenance of cristae morphology.

IMMT Antibody (Center) - References

Bernert, G., et al., *Proteomics* 2 (12), 1752-1757 (2002)

IMMT Antibody (Center) - Citations

- [Rapid degradation of mutant SLC25A46 by the ubiquitin-proteasome system results in MFN1/2 mediated hyperfusion of mitochondria.](#)