10320 Camino Santa Fe, Suite G
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IMMT Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2931c

Specification

IMMT Antibody (Center) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	Q16891
Other Accession	Q3KR86, Q8CAQ8
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
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

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

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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).

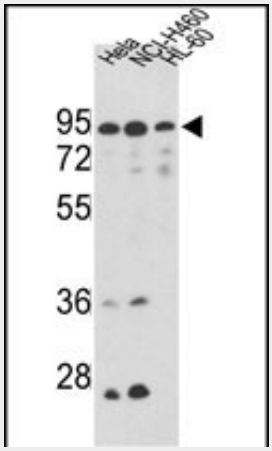
Cellular Location
Mitochondrion inner membrane; Single-pass membrane protein. Mitochondrion

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 Cytomety
- 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.

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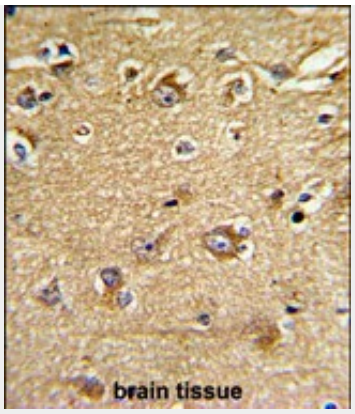
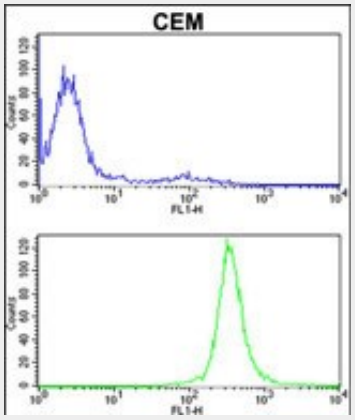


Formalin-fixed and paraffin-embedded human brain tissue reacted with IMMT Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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.