

MTCH2 Antibody

Catalog # ASC10861

Specification

MTCH2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC, IF
Q791V5
NP_055157, 5815347
Human, Mouse
Rabbit
Polyclonal
IgG
MTCH2 antibody can be used for detection of MTCH2 by Western blot at 1 μg/mL.
Antibody can also be used for immunohistochemistry starting at 5 μg/mL.
For immunofluorescence start at 20 μg/mL.

MTCH2 Antibody - Additional Information

Gene ID Target/Specificity Mtch2:

56428

Reconstitution & Storage

MTCH2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

MTCH2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MTCH2 Antibody - Protein Information

Name Mtch2 {ECO:0000312|MGI:MGI:1929260}

Function

Protein insertase that mediates insertion of transmembrane proteins into the mitochondrial outer membrane. Catalyzes insertion of proteins with alpha-helical transmembrane regions, such as signal- anchored, tail-anchored and multi-pass membrane proteins. Does not mediate insertion of beta-barrel transmembrane proteins (By similarity). Also acts as a receptor for the truncated form of pro- apoptotic BH3-interacting domain death agonist (p15 BID) and has therefore a critical function in apoptosis (PubMed:20436477, PubMed:2621959126876167, PubMed:30510213<a href="http://www.uniprot.org/citations/20436477" the protein size of the prot



target="_blank">20436477, PubMed:26219591, PubMed:26876167). Acts as a regulator of mitochondrial fusion, essential for the naive-to-primed interconversion of embryonic stem cells (ESCs) (PubMed:30510213). Acts as a regulator of lipid homeostasis and has a regulatory role in adipocyte differentiation and biology (PubMed:26876167, PubMed:28127879).

Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein

Tissue Location

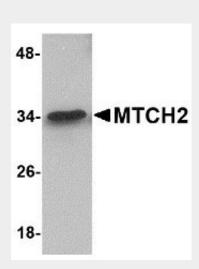
Expressed in a wide variety of tissues. Predominant expressed in liver, kidney, heart, skeletal muscle and testis

MTCH2 Antibody - Protocols

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

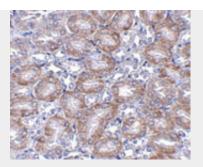
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

MTCH2 Antibody - Images

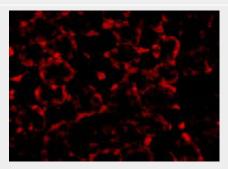


Western blot analysis of MTCH2 in 293 cell lysate with MTCH2 antibody at 1 μ g/mL.





Immunohistochemistry of MTCH2 in mouse kidney tissue with MTCH2 antibody at 5 µg/mL.



Immunofluorescence of MTCH2 in Mouse Kidney cells with MTCH2 antibody at 20 µg/mL.

MTCH2 Antibody - Background

MTCH2 Antibody: Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer. The Bcl-2 family of proteins is comprised of critical regulators of apoptosis that can be divided into two classes: those that inhibit apoptosis and those that promote cell death. MTCH2 is a member of the mitochondrial carrier protein family that catalyze the exchange of substrates across the inner mitochondrial membrane and is targeted by Bid, a pro-apoptotic Bcl-2 family member, in response to apoptotic signals, suggesting that MTCH2 may play a key role in the mitochondrial apoptosis pathway.

MTCH2 Antibody - References

Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ.2000; 7:2-7.

Cory S, Huang DCS, and Adams JM. The Bcl-2 family: roles in cell survival and oncogenesis. Oncogene2003; 22:8590-607.

Heiser D, Labi V, Erlacher M, et al. The Bcl-2 protein family and its role in the development of neoplastic disease. Exp. Geron.2004; 39:1125-35.

Grinberg M, Schwarz M, Zaltsman Y, et al. Mitochondrial carrier homolog 2 is a target of tBID in cells signaled to die by tumor necrosis factor alpha. Mol. Cell. Biol.2005; 25:4579-90.