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MFN2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant MFN2.
Catalog # AT2851a

Product Information

Application	WB, IHC
Primary Accession	O95140
Other Accession	NM_014874
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	6A8
Calculated MW	86402

Additional Information

Gene ID	9927
Other Names	Mitofusin-2, 365-, Transmembrane GTPase MFN2, MFN2, CPRP1, KIAA0214
Target/Specificity	MFN2 (NP_055689, 661 a.a. ~ 757 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MFN2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

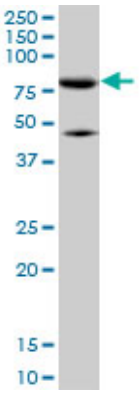
Background

This gene encodes a mitochondrial membrane protein that participates in mitochondrial fusion and contributes to the maintenance and operation of the mitochondrial network. This protein is involved in the regulation of vascular smooth muscle cell proliferation, and it may play a role in the pathophysiology of obesity. Mutations in this gene cause Charcot-Marie-Tooth disease type 2A2, and hereditary motor and sensory neuropathy VI, which are both disorders of the peripheral nervous system. Defects in this gene have also been associated with early-onset stroke. Two transcript variants encoding the same protein have been identified.

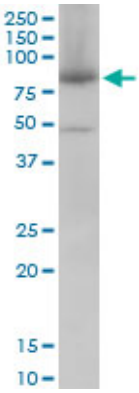
References

Mitofusin-2 protects against cold stress-induced cell injury in HEK293 cells. Zhang W, et al. Biochem Biophys Res Commun, 2010 Jun 25. PMID 20580691.Severe CMT type 2 with fatal encephalopathy associated with a novel MFN2 splicing mutation. Boaretto F, et al. Neurology, 2010 Jun 8. PMID 20530328.Expression of mitofusin 2(R94Q) in a transgenic mouse leads to Charcot-Marie-Tooth neuropathy type 2A. Cartoni R, et al. Brain, 2010 May. PMID 20418531.MFN2 point mutations occur in 3.4% of Charcot-Marie-Tooth families. An investigation of 232 Norwegian CMT families. Braathen GJ, et al. BMC Med Genet, 2010 Mar 29. PMID 20350294.Notch-activated signaling cascade interacts with mitochondrial remodeling proteins to regulate cell survival. Perumalsamy LR, et al. Proc Natl Acad Sci U S A, 2010 Apr 13. PMID 20339081.

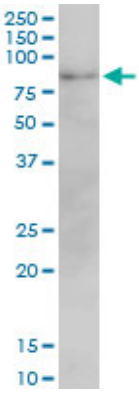
Images



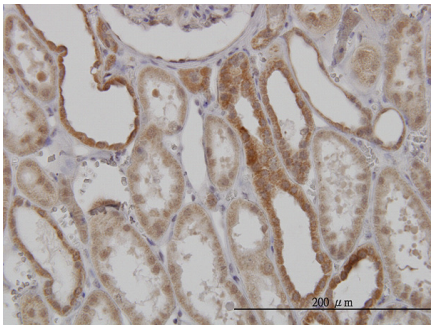
MFN2 monoclonal antibody (M01), clone 6A8. Western Blot analysis of MFN2 expression in HeLa (Cat # L013V1).



MFN2 monoclonal antibody (M01), clone 6A8. Western Blot analysis of MFN2 expression in PC-12((Cat # AT2851a)



MFN2 monoclonal antibody (M01), clone 6A8. Western Blot analysis of MFN2 expression in NIH/3T3((Cat # AT2851a)



Immunoperoxidase of monoclonal antibody to MFN2 on formalin-fixed paraffin-embedded human kidney. [antibody concentration 3 ug/ml]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.