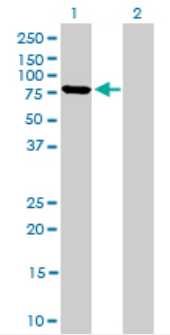
CX Grade

MFN2 monoclonal antibody (M03J), clone 4H8

Catalog # H00009927-M03J Size 100 ug

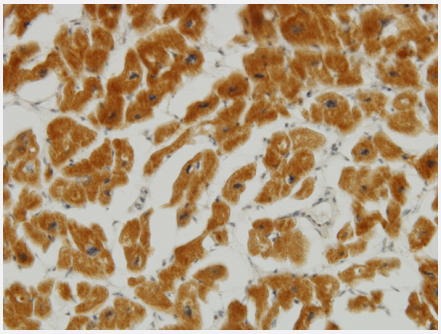
Applications



Western Blot (Transfected lysate)

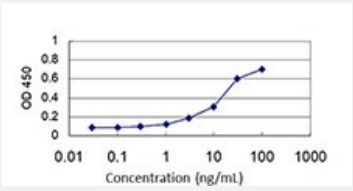
Western Blot analysis of MFN2 expression in transfected 293T cell line by MFN2 monoclonal antibody (M03A), clone 4H8.

Lane 1: MFN2 transfected lysate(86.4 KDa).
Lane 2: Non-transfected lysate.



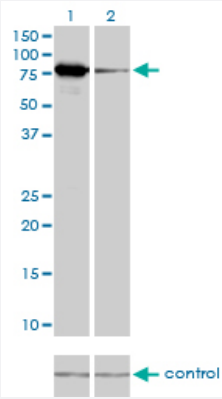
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to MFN2 on formalin-fixed paraffin-embedded human heart. [antibody concentration 5 ug/ml]



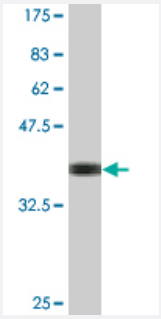
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged MFN2 is approximately 1ng/ml as a capture antibody.



RNAi Knockdown (Antibody validated)

Western blot analysis of MFN2 over-expressed 293 cell line, cotransfected with MFN2 Validated Chimera RNAi (Cat # H00009927-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with MFN2 monoclonal antibody (M03), clone 4H8 (Cat # H00009927-M03). GAPDH (36.1 kDa) used as specificity and loading control.



Western Blot detection against Immunogen (36.41 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant MFN2. This product is belong to Cell Culture Grade Antibody (CX Grade).
Immunogen	MFN2 (NP_055689, 661 a.a. ~ 757 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	FKRQFVEHASEKLQLVISYTGSNCSHQVQQELSGTFAHLCQQVDVTRENLEQEIAAMNKKIEVLDSLQSKAKLLRNKAGWLDSELNMFTHQYLQPSR
Host	Mouse
Reactivity	Human, Rat
Interspecies Antigen Sequence	Mouse (93); Rat (93)
Preparation Method	Cell Culture Production
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.41 KDa) .
Storage Buffer	In 1x PBS, pH 7.4

Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

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  Protocol Download

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  Protocol Download

Gene Info — MFN2

Entrez GeneID	9927
GeneBank Accession#	NM_014874
Protein Accession#	NP_055689

Gene Name	MFN2
Gene Alias	CMT2A, CMT2A2, CPRP1, HSG, KIAA0214, MARF
Gene Description	mitofusin 2
Omim ID	601152 608507 609260
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq
Other Designations	OTTHUMP00000002509|hyperplasia suppressor|mitochondrial assembly regulatory factor|mitofusin-2|transmembrane GTPase MFN2

Publication Reference

- Homozygous mutations in MFN2 cause multiple symmetric lipomatosis associated with neuropathy.

  Sawyer SL, Cheuk-Him Ng A, Innes AM, Wagner JD, Dyment DA, Tetreault M; Care4Rare Canada Consortium, Majewski J, Boycott KM, Screaton RA, Nicholson G.

  Human Molecular Genetics 2015 Sep; 24(18):5109.

  Application: WB, WB-Tr, WB-Ti, Human, Mouse, Fibroblasts, Liver, Brain, Heart, Brown fat, Muscle, Pancreas

Disease

- Charcot-Marie-Tooth Disease
- Genetic Predisposition to Disease
- Glaucoma
- Hereditary Sensory and Motor Neuropathy