

Product Datasheet

Mitofusin 1 Antibody (3C9) - Azide and BSA Free H00055669-M04

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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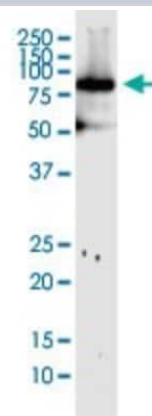
H00055669-M04

Mitofusin 1 Antibody (3C9) - Azide and BSA Free

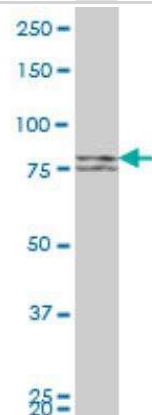
Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	3C9
Preservative	No Preservative
Isotype	IgG2a Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4
Product Description	
Host	Mouse
Gene ID	55669
Gene Symbol	MFN1
Species	Human, Mouse, Rat
Marker	Mitochondrial Fusion Marker
Specificity/Sensitivity	MFN1 - mitofusin 1. This antibody may cross react with MFN2 protein.
Immunogen	MFN1 (AAH40557, 1 a.a. ~ 741 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. MAEPVSPLKHFVLAKKAITAIFDQLLEFVTEGSHFVEATYKNPELDRIATEDDLV EMQGYKDKLSIIGEVLRRHMKVAFFGRTSSGKSSVINAMLWDKVLPSGIGHIT NCFLSVEGTDGDKAYLMTEGSDEKKSVKTVNQLAHLMDKDLKAGCLVRVF WPKAKCALLRDDLVLVDSPGTDVTTTELDSWIDKFCLDADVFLVANSESTLMN TEKHFFHKVNERLSKPNIFILNNRWDASASEPEYMEDVRRQHMERCCLHFLVEE LKVVNALAEQNRIFVSAKEVLSARKQKAQGMPESGVALAEGFHARLQEFQNF EQIFEECISQSAVTKFEQHTIRAKQILATVKNIMDSVNLAEDKRHYSVEERED QIDRLDFIRNQMNLLTLDVKKKIKEVTEEVANKVSCAMTDEICRLSVLVDFCSE FHPNPDVLKIYKSELNKHIEDGMGRNLADRCTDEVNALVLQTQQEIIENLKPLLP AGIQDKLHTLIPCKKFDLSYNLNYHKLCSDQEDIVFRFSLGWSSLVHRFLGPR NAQRVLLGLSEPIFQLPRSLASTPTAPTTPATPDNASQEELMITLVTGLASVTSR TSMGIIIVGGVIWKTIGWKLLSVSLTMYGALYLYERLSWTTHAKERAFKQQFVNY ATEKLRMIVSSTSANCASHQVKQIATTFARLCQQVDITQKQLEEEIARLPKEIDQ LEKIQNNSKLLRNKAVQLENELENFTKQFLPSSNEES
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.
Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Knockdown Validated
Recommended Dilutions	Western Blot 1:500, Flow Cytometry, ELISA, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Knockdown Validated
Application Notes	Antibody reactive against cell lysate and recombinant protein for western blot. It has also been used for RNAi validation and ELISA. Flow Cytometry was reported in scientific literature.

Images

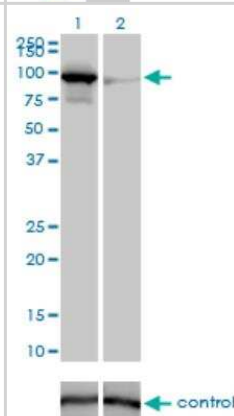
Western Blot: Mitofusin 1 Antibody (3C9) [H00055669-M04] - Analysis of MFN1 expression in HepG2.



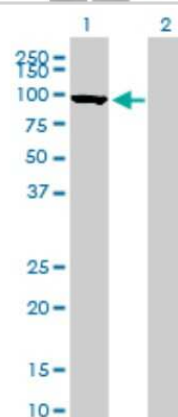
Western Blot: Mitofusin 1 Antibody (3C9) [H00055669-M04] - MFN1 monoclonal antibody (M04), clone 3C9 Western Blot analysis of MFN1 expression in HeLa (Cat # L013V1).



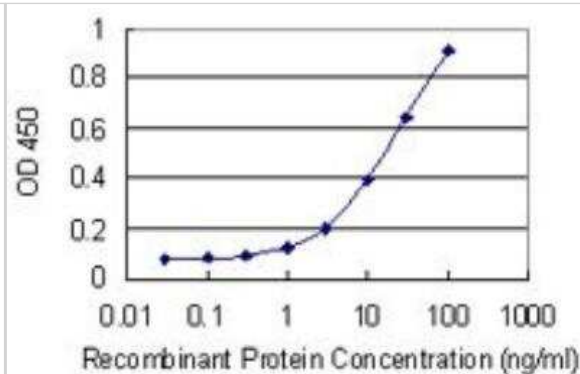
Western Blot: Mitofusin 1 Antibody (3C9) [H00055669-M04] - Western blot analysis of MFN1 over-expressed 293 cell line, cotransfected with MFN1 Validated Chimera RNAi or non-transfected control. Blot probed with H00055669-M04. GAPDH (36.1 kDa) used as loading control.



Western Blot: Mitofusin 1 Antibody (3C9) [H00055669-M04] - Analysis of MFN1 expression in transfected 293T cell line by MFN1 monoclonal antibody (M04), clone 3C9. Lane 1: MFN1 transfected lysate (84.2 KDa). Lane 2: Non-transfected lysate.



ELISA: Mitofusin 1 Antibody (3C9) [H00055669-M04] - Detection limit for recombinant GST tagged MFN1 is 0.3 ng/ml as a capture antibody.



Publications

Katharina Z, Anna L, Nicolas N et al. Temporal Analysis of Protein Ubiquitylation and Phosphorylation During Parkin-Dependent Mitophagy. *Mol Cell Proteomics*. 2021-12-30 [PMID: 34974192]

Koyano F, Yamano K, Kosako H et al. Parkin-mediated ubiquitylation redistributes MITOL/March5 from mitochondria to peroxisomes. *EMBO Rep*. 2019-10-10 [PMID: 31602805]

Gundersen A, Kugler B, McDonald P et al. Altered Mitochondrial Network Morphology and Regulatory Proteins in Mitochondrial Quality Control in Myotubes from Severely Obese Humans With or Without Type 2 Diabetes. *Appl Physiol Nutr Metab*. 2019-07-29 [PMID: 31356754]

D Hu, X Sun, A Magpusao, Y Fedorov, M Thompson, B Wang, K Lundberg, DJ Adams, X Qi Small-molecule suppression of calpastatin degradation reduces neuropathology in models of Huntington's disease *Nature Communications*, 2021-09-06;12(1):5305. 2021-09-06 [PMID: 34489447]

Shigeto S, Sachiko N, Satoru T et al. Homeostatic p62 levels and inclusion body formation in CHCHD2 knockout mice. *Hum Mol Genet*. 2021-04-30 [PMID: 33631794]

Yingjie G, Huan Z, Chen Y et al. Small molecule agonist of mitochondrial fusion repairs mitochondrial dysfunction. *Nat Chem Biol*. 2023-01-12 [PMID: 36635564]

Lei L, Yanyan X, Nan J et al. VDAC1 as a target in cisplatin anti-tumor activity through promoting mitochondria fusion. *Biochem Biophys Res Commun*. 2021-05-07 [PMID: 33971568]

Ferreira JCB, Campos JC, Qvit N et al. A selective inhibitor of mitofusin 1-βIIPKC association improves heart failure outcome in rats. *Nat Commun*. 2019-04-09 [PMID: 30659190]

Zhou Q, Li H, Li Y et al. Inhibiting neddylation modification alters mitochondrial morphology and reprograms energy metabolism in cancer cells. *JCI Insight*. 2019-05-04 [PMID: 30668548]

Ishikawa K, Yamamoto S, Hattori S et al. Acquired expression of mutant Mitofusin 2 causes progressive neurodegeneration and abnormal behavior. *J Neurosci*. 2019-02-03 [PMID: 30606759]

Zhao Y, Sun X, Hu D et al. ATAD3A oligomerization causes neurodegeneration by coupling mitochondrial fragmentation and bioenergetics defects. *Nat Commun*. 2019-03-26 [PMID: 30914652]

Furuya N, Kakuta S, Sumiyoshi K et al. NDP52 interacts with mitochondrial RNA poly(A) polymerase to promote mitophagy. *EMBO Rep* 2018-10-11 [PMID: 30309841]

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Products Related to H00055669-M04

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)
H00055669-Q01-10ug	Recombinant Human Mitofusin 1 GST (N-Term) Protein

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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