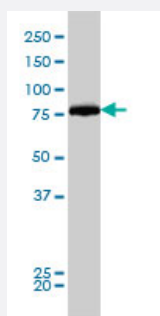


DNM1L monoclonal antibody (M01), clone 3B5

Catalog # H00010059-M01

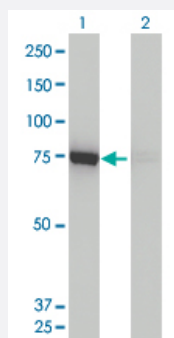
Size 100 ug

Applications



Western Blot (Cell lysate)

DNM1L monoclonal antibody (M01), clone 3B5 Western Blot analysis of DNM1L expression in K-562 (Cat # L009V1).

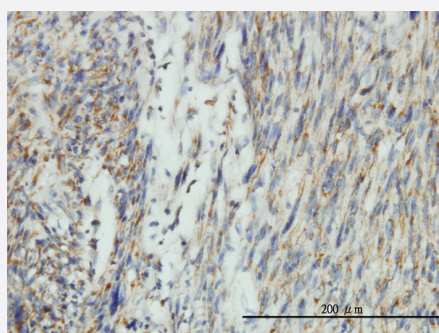


Western Blot (Transfected lysate)

Western Blot analysis of DNM1L expression in transfected 293T cell line by DNM1L monoclonal antibody (M01), clone 3B5.

Lane 1: DNM1L transfected lysate(79 KDa).

Lane 2: Non-transfected lysate.

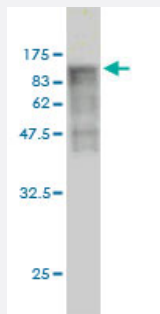
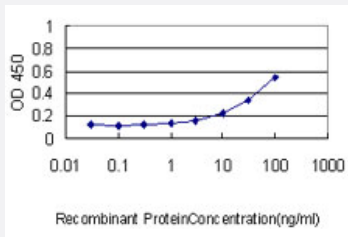


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to DNM1L on formalin-fixed paraffin-embedded human leiomyosarcoma tissue. [antibody concentration 1 ug/ml]

Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DNM1L is approximately 0.3ng/ml as a capture antibody.



Western Blot detection against Immunogen (103.84 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant DNM1L.
Immunogen	DNM1L (AAH24590.1, 1 a.a. ~ 710 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MEALIPVINKLQDVFNVTGADIQLPQMVVGTQSSGKSSVLESVGRDLLPRGTGMTRRPLILQLVH VSQEDKRKTTGEENGVEAEWGKFLHTKNKLYTDFDEIRQEIENETERISGNNKGVSPPIHLKIFS PNVVNLTLVDLPGMTKVPVGDQPKDIELQIRELILRFISNPNSIILAVTAANTDMATSEALKISREVD DGRRTLAVITKLDLMDAGTDAMDVLMGRVIPVKLGIGVVNRSQDLINNKKSVTDSIRDEYAFQKK YPSLANRNGTKYLARTLNRLMHHRDCLPELKTRINVLAAQYQSLLNSYGEVDDKSATLLQLITKF ATEYCNTIEGTAKYIETSELGGARICYIFHETFGRTLESVDPLGGLNTIDILTAIRNATGPRPALFVPE VSFELLVKRQIKRLEEPSLRCVELVHEEMQRIQHCSNYSTQELLRFPKLHDAIVEVVTCLLRKRLP VTNEMVHNLVAIELAYINTKHPDFADACGLMNNNIEEQRRNRLARELPSAVSRDKLIQDSRRET KNVASGGGGVGDGVQEPTTGNWVRGMLKTSKAEELLAEEKSKPIIMPASPQKGHAVNLLDVPVPV ARKLSAREQRDCEVIERLIKSYFLMRKNIQDSVPKAVMHFLVNHVKDTLQSELVGQLYKSSLLDDL LTESDMAQRRKEAADMLKALQGASQIAEIRETHLW
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (97); Rat (98)
Isotype	IgG2b kappa

Quality Control Testing

Antibody Reactive Against Recombinant Protein.
Western Blot detection against Immunogen (103.84 KDa) .

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

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

Applications

- Western Blot (Cell lysate)

DNM1L monoclonal antibody (M01), clone 3B5 Western Blot analysis of DNM1L expression in K-562 (Cat # L009V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of DNM1L expression in transfected 293T cell line by DNM1L monoclonal antibody (M01), clone 3B5.

Lane 1: DNM1L transfected lysate(79 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

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

Immunoperoxidase of monoclonal antibody to DNM1L on formalin-fixed paraffin-embedded human leiomyosarcoma tissue.
[antibody concentration 1 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DNM1L is approximately 0.3ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — DNM1L

Entrez GeneID

[10059](#)

GeneBank Accession#	BC024590
Protein Accession#	AAH24590.1
Gene Name	DNM1L
Gene Alias	DLP1, DRP1, DVLP, DYMPLE, DYNV-11, FLJ41912, HDYNV, VPS1
Gene Description	dynamamin 1-like
Omim ID	603850
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the dynamamin superfamily of GTPases. Members of the dynamamin-related subfamily, including the <i>S. cerevisiae</i> proteins Dnm1 and Vps1, contain the N-terminal tripartite GTPase domain but do not have the pleckstrin homology or proline-rich domains. This protein establishes mitochondrial morphology through a role in distributing mitochondrial tubules throughout the cytoplasm. The gene has 3 alternatively spliced transcripts encoding different isoforms. These transcripts are alternatively polyadenylated. [provided by RefSeq]
Other Designations	Dnm1p/Vps1p-like protein dynamamin 1-like protein dynamamin family member proline-rich carboxyl-terminal domain less dynamamin-like protein 4 dynamamin-like protein IV dynamamin-related protein 1

Publication Reference

- [Increasing energy expenditure through exercise and low ambient temperature offers oxidative protection to the hypothalamus after high-fat feeding to mice.](#)

Julia Jaroslawska, Emilia Gospodarska, Agnieszka Korytko.

Journal of Neuroendocrinology 2022 Apr; 34(4):e13095.

Application: WB-Ti, Mouse, Mouse hypothalamus

- [Drug repositioning as a therapeutic strategy for neurodegenerations associated with OPA1 mutations.](#)

Serena J Aleo, Valentina Del Dotto, Mario Fogazza, Alessandra Maresca, Tiziana Lodi, Paola Goffrini, Anna Ghelli, Michela Rugolo, Valerio Carelli, Enrico Baruffini, Claudia Zanna.

Human Molecular Genetics 2021 Jan; 29(22):3631.

Application: WB-Ce, Mouse , MEFs

- [Coenzyme Q biosynthesis inhibition induces HIF-1 \$\alpha\$ stabilization and metabolic switch toward glycolysis.](#)

Irene Liparulo, Christian Bergamini, Marco Bortolus, Natalia Calonghi, Giuseppe Gasparre, Ivana Kurelac, Luca Masin, Nicola Rizzardi, Michela Rugolo, Wenping Wang, Serena J Aleo, Alisar Kiwan, Cristian Torri, Claudia Zanna, Romana Fato.

The FEBS Journal 2021 Mar; 288(6):1956.

Application: WB-Ce, Human, T67 cells

- [Administration of Enalapril Started Late in Life Attenuates Hypertrophy and Oxidative Stress Burden, Increases Mitochondrial Mass, and Modulates Mitochondrial Quality Control Signaling in the Rat Heart.](#)

Picca A, Sirago G, Pesce V, Lezza AMS, Calvani R, Bossola M, Villani ER, Landi F, Leeuwenburgh C, Bernabei R, Carter CS, Marzetti E.

Biomolecules 2018 Dec; 8(4): E177.

Application: WB-Ti, Rat, Rat hearts

- [Deciphering OPA1 mutations pathogenicity by combined analysis of human, mouse and yeast cell models.](#)

Del Dotto V, Fogazza M, Musiani F, Maresca A, Aleo SJ, Caporali L, La Morgia C, Nolli C, Lodi T, Goffrini P, Chan D, Carelli V, Rugolo M, Baruffini E, Zanna C.

Biochimica et Biophysica Acta. Molecular Basis of Disease 2018 Oct; 1864(10):3496.

Application: WB-Tr, Human, Mouse, Fibroblasts, MEFs

- [Dietary supplementation with acetyl-L-carnitine counteracts age-related alterations of mitochondrial biogenesis, dynamics and antioxidant defenses in brain of old rats.](#)

Nicassio L, Fracasso F, Sirago G, Musicco C, Picca A, Marzetti E, Calvani R, Cantatore P, Gadaleta MN, Pesce V.

Experimental Gerontology 2017 Aug; 98:99.

Application: WB-Ti, Rat, Rat brain

- [Increase in proteins involved in mitochondrial fission, mitophagy, proteolysis and antioxidant response in type I endometrial cancer as an adaptive response to respiratory complex I deficiency.](#)

Cormio A, Musicco C, Gasparre G, Cormio G, Pesce V, Sardanelli A, Gadaleta MN.

Biochemical and Biophysical Research Communications 2017 Jul; 491(1):85.

Application: WB-Ti, Human, Human type I endometrial cancer

- [Hyperinsulinemia induces insulin resistance in dorsal root ganglion neurons.](#)

Kim B, McLean LL, Philip SS, Feldman EL.

Endocrinology 2011 Oct; 152(10):3638.

Application: WB, Mouse, Rat, Dorsal root ganglion neurons

- [Mitochondrial biogenesis and fission in axons in cell culture and animal models of diabetic neuropathy.](#)

Vincent AM, Edwards JL, McLean LL, Hong Y, Cerri F, Lopez I, Quattrini A, Feldman EL.

Acta Neuropathologica 2010 Oct; 120(4):477.

Application: IF, Mouse, Mouse dorsal root ganglia neurons

- [Diabetes regulates mitochondrial biogenesis and fission in mouse neurons.](#)

Edwards JL, Quattrini A, Lentz SI, Figueroa-Romero C, Cerri F, Backus C, Hong Y, Feldman EL.

Diabetologia 2010 Jan; 53(1):160.

Application: WB, Mouse, Rat, Neuron

- [SUMOylation of the mitochondrial fission protein Drp1 occurs at multiple nonconsensus sites within the B domain and is linked to its activity cycle.](#)

Figuroa-Romero C, Iniguez-Lluh JA, Stadler J, Chang CR, Arnoult D, Keller PJ, Hong Y, Blackstone C, Feldman EL.

FASEB Journal 2009 Nov; 23(11):3917.

Application: WB-Tr, Human, HEK 293 cells

Pathway

- [Endocytosis](#)
- [Fc gamma R-mediated phagocytosis](#)

Disease

- [Tobacco Use Disorder](#)