

Active Recombinant Full Length Human DNM1L Protein, C-Flag-tagged

Cat. No. DNM1L-199HFL Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human DNM1L Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	This gene encodes a member of the dynamin superfamily of GTPases. The encoded protein mediates mitochondrial and peroxisomal division, and is involved in developmentally regulated apoptosis and programmed necrosis. Dysfunction of this gene is implicated in several neurological disorders, including Alzheimer's disease. Mutations in this gene are associated with the autosomal dominant disorder, encephalopathy, lethal, due to defective mitochondrial and peroxisomal fission (EMPF). Alternative splicing results in multiple transcript variants encoding different isoforms.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	Cell treatment
Molecular Mass	81.7 kDa
AA Sequence	MEALIPVINKLQDVFNTVGADIIQLPQIVVVGTTQSSGKSSVLESVGRDLLPRGTGIVT RRPLILQLVHV SQEDKRKTTGEENGVEAEWVGKFLHTKNKLYTDFDEIRQEIENETE

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RISGNNKGV SPEIHLKIFSPNVV NLTLDLPGMTKVPVGDQPKDIELQIRELILRFIS
 NPNSIILAVTAANTDMATSEALKISREVDPDGRRT LAVITKLDLMDAGTDAMDVLGMG
 RVIPVKLGIIQVVNRSQLDINNKKSVTDSIRDEYAFLLQKKYPSLANRN GTKYLARTLN
 RLLMHHIRDCLPELKTRINVLAAQYQSLLNSYGEVDDKSATLLQLITKFATEYCNIE
 G TAKYIETSELCCGARICYIFHETFGRTLESVDPLGGLNTIDILTAIRNATGPRPALFV
 PEVSFELLVKRQ IKRLEEPSLRCVELVHEEMQRRIQHCSNYSTQELLRFPKLHDAIVE
 VVTCLLRKRLPVTNEMVHNLVAIE LAYINTKHPDFADACGLMNNNIEEQRRNRLARE
 LPSAVSRDKSSKVPALAPASQEPSPAASAEADGKLI QDSRRETKNVASGGGGVGVG
 DGVQEPTTGNWRGMLKTSKAEELLAEEKSKPIIMPASPQKGHAVNLLDVPV PVAR
 KLSAREQRDCEVIERLIKSYFLIVRKNIQDSVPKAVMHFLVNHVKDTLQSELVGLYK
 SLLDDL
 TESEDMAQRRKEAADMLKALQGASQIIAIRETHLWTRTRPLEQKLISEEDLAANDIL
 DYKDDDDKV

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining.

Stability Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

Storage Store at -80 centigrade.

Concentration >50 ug/mL as determined by microplate BCA method.

Preparation Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

Protein Pathways Endocytosis, Fc gamma R-mediated phagocytosis

Full Length Full L.

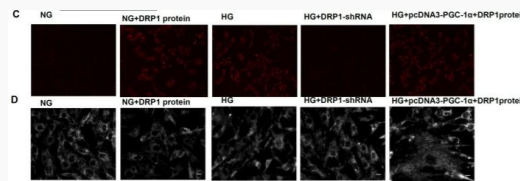
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GENE INFORMATION

Gene Name	DNM1L dynamin 1 like [Homo sapiens (human)]
Official Symbol	DNM1L
Synonyms	DLP1; DRP1; DVLP; EMPF; OPA5; EMPF1; DYMPLE; HDYNIV
Gene ID	10059
mRNA Refseq	NM_012062.5
Protein Refseq	NP_036192.2
MIM	603850
UniProt ID	O00429



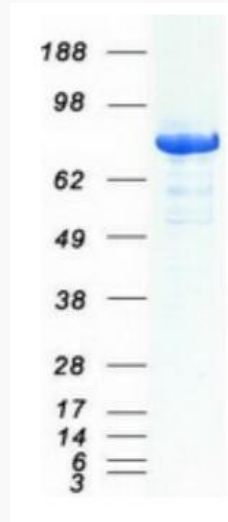
Inhibitory action of PGC-1alpha on mitochondrial fragmentation occurs via the downregulation of DRP1. Images show the ROS production (panel C) and mitochondrial morphology changes (panel D) in rat glomerular mesangial cells (RMCs) exposed to normal glucose (NG), NG incubated with DRP1 protein and high glucose (HG) conditions, RMCs transfected with DRP1 shRNA to silence the expression of DRP1 under HG conditions (HG+DRP1-shRNA), and RMCs transfected with pcDNA-PGC-1alpha to overexpress PGC-1alpha and exogenous

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DPR1 protein under HG conditions (HG+pcDNA3-PGC1alpha+DRP1).



Coomassie blue staining of purified DNM1L protein.

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