Phospho-DRP1 (Ser548) Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	DRP1, Blocking Peptide
Full Product Name	Phospho-DRP1 (Ser548) Blocking Peptide
Product Gene Name	DRP1 blocking peptide
Product Synonym Gene Name	DNM1L
Product Synonym Names	DLP1; dnm1l; DNM1L_HUMAN; Dnm1p/Vps1p-like protein; dnml1; DRP1; DVLP; Dymple; Dynamin 1 like; Dynamin family member proline-rich carboxyl-terminal domain less; Dynamin like protein; Dynamin related protein 1; Dynamin-1-like protein; Dynamin-like protein 4; Dynamin-like protein; Dynamin-like protein IV; Dynamin-related protein 1; DYNIV 11; EMPF; EMPF1; FLJ41912; HdynIV; VPS1
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	DRP1 (Ser548) peptide (MBS9616133) is used for blocking the activity of DRP1 (Ser548) antibody (MBS9612852)
Molecular Weight	82KD
Chromosome Location	Chromosome: 12; NC_000012.11 (32832137..32898584). Location: 12p11.21
OMIM	603850
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for DRP1 blocking peptide	Blocking/Control
Related Product Information for DRP1 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of DRP1 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for DRP1 purchase	MBS9616133 is a blocking peptide targeting DRP1. Also known as Phospho-DRP1 (Ser548) Blocking Peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DRP1. It may not necessarily be applicable to this product.

NCBI GI #	171460918
NCBI GeneID	10059

NCBI Accession #	NP_005681.2
UniProt Primary Accession #	O00429
UniProt Secondary Accession #	O14541; O60709; Q7L6B3; Q8TBT7; Q9BWM1; Q9Y5J2; A8K4X9; B4DSU8
UniProt Related Accession #	O00429
GenBank Nucleotide #	NM_005690.4
NCBI Official Full Name	dynamin-1-like protein isoform 3
NCBI Official Synonym Full Names	dynamin 1-like
NCBI Official Symbol	DNM1L
NCBI Official Synonym Symbols	DLP1; DRP1; DVLP; EMPF; DYMPLE; HDYNIV
UniProt Protein Name	Dynamin-1-like protein
UniProt Synonym Protein Names	Dnm1p/Vps1p-like protein; DVLP; Dynamin family member proline-rich carboxyl-terminal domain less; Dymple; Dynamin-like protein; Dynamin-like protein 4; Dynamin-like protein IV; HdynIV; Dynamin-related protein 1
UniProt Gene Name	DNM1L
UniProt Synonym Gene Names	DLP1; DRP1; DVLP; Dymple; HdynIV
UniProt Entry Name	DNM1L_HUMAN
NCBI Protein Information	dynamin-1-like protein; dynamin-like protein 4; dynamin-like protein IV; Dnm1p/Vps1p-like protein; dynamin-related protein 1; dynamin family member proline-rich carboxyl-terminal domain less
NCBI Summary for DRP1	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. [provided by RefSeq, Jun 2013]

UniProt Comments for DRP1	DRP1: Functions in mitochondrial and peroxisomal division. Mediates membrane fission through oligomerization into ring-like structures which wrap around the scission site to constict and sever the mitochondrial membrane through a GTP hydrolysis- dependent mechanism. Required for normal brain development. Facilitates developmentally-regulated apoptosis during neural tube development. Required for a normal rate of cytochrome c release and caspase activation during apoptosis. Also required for mitochondrial fission during mitosis. May be involved in vesicle transport. Homotetramer; dimerizes through the N-terminal GTP-middle region of one molecule binding to the GED domain of another DNM1L molecule. Can self-assemble in multimeric ring-like structures. Interacts with BCL2L1; the interaction stimulates the GTPase activity of DMN1L in synapses and increases the number of axonal mitochondria and the size and number of synaptic vesicle clusters. Interacts with FIS1. Interacts with GSK3B and MARCH5. Interacts (via the GTPase and B domains) with UBE2I; the interaction promotes sumoylation of DNM1L, mainly in ite B domain. Interacts with PPP3CA; the interaction dephosphorylates DNM1L and regulates its transition to mitochondria. Interacts witn MID49 and MID51. Ubiquitously expressed with highest levels found in skeletal muscles, heart, kidney and brain. Isoform 1 is brain-specific. Isoform 2 and isoform 3 are predominantly expressed in testis and skeletal muscles respectively. Isoform 4 is weakly expressed in brain, heart and kidney. Isoform 5 is dominantly expressed in liver, heart and kidney. Isoform 6 is expressed in neurons. Belongs to the dynamin family. 6 isoforms of the human protein are produced by alternative splicing. Protein type: Mitochondrial; Microtubule-binding; Motor; EC 3.6.5.5; Endoplasmic reticulum; Hydrolase; Apoptosis Chromosomal Location of Human Ortholog: 12p11.21 Cellular Component: Golgi apparatus; microtubule; protein complex; intracellular membrane-bound organelle; mitochondrion; synaptic vesicle membrane; coated pit; cytosol; mitochondrial outer membrane; membrane; perinuclear region of cytoplasm; cytoplasm; peroxisome; cell junction Molecular Function: GTPase activity; identical protein binding; protein binding; protein homodimerization activity; GTP binding; ubiquitin protein ligase binding; lipid binding Biological Process: peroxisome fission; mitochondrial fission; release of cytochrome c from mitochondria; positive regulation of protein secretion; apoptosis; metabolic process; positive regulation of apoptosis; regulation of protein oligomerization; endocytosis; mitochondrial fragmentation during apoptosis; cell structure disassembly during apoptosis; protein homotetramerization Disease: Encephalopathy, Lethal, Due To Defective Mitochondrial And Peroxisomal Fission
Research Articles on DRP1	**1.** GSK3beta-mediated phosphorylation at Ser693 of Drp1 may be associated with mitochondrial elongation.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/drp1/9616133