DRP1 Monoclonal Antibody

Catalog No	YP-mAb-00692
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	DNM1L
Protein Name	Dynamin-1-like protein
Immunogen	Synthesized peptide derived from DRP1 . at AA range: 580-660
Specificity	DRP1 Monoclonal Antibody detects endogenous levels of DRP1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNM1L; DLP1; DRP1; Dynamin-1-like protein; 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-rela
Observed Band	80kD
Cell Pathway	Cytoplasm, cytosol. Golgi apparatus. Endomembrane system; Peripheral membrane protein. Mitochondrion outer membrane ; Peripheral membrane protein. Peroxisome. Membrane, clathrin-coated pit . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane . Mainly cytosolic. Recruited by RALA and RALBP1 to mitochondrion during mitosis (PubMed:21822277). Translocated to the mitochondrial membrane through O-GlcNAcylation and interaction with FIS1. Colocalized with MARCHF5 at mitochondrial membrane. Localizes to mitochondria at sites of division. Localizes to mitochondria following necrosis induction. Recruited to the mitochondrial outer membrane by interaction with MIEF1. Mitochondrial recruitment is inhibited by C11orf65/MFI (By similarity). Associated with peroxisomal membranes, partly re
Tissue Specificity	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.

Function	catalytic activity:GTP + H(2)O = GDP + phosphate.,function:Functions in mitochondrial and peroxisomal division probably by regulating membrane fission. Enzyme hydrolyzing GTP that oligomerizes to form ring-like structures and is able to remodel membranes. May also play a role on organelles of the secretory pathway.,miscellaneous:Isoform 1 and isoform 2 inhibits peroxisomal division when overexpressed while isoform 3 and isoform 4 have no effect.,PTM:Phosphorylated by GSK3B.,similarity:Belongs to the dynamin family.,similarity:Contains 1 GED domain.,subcellular location:Mainly cytosolic. Also membrane-associated. Localizes to mitochondria at spots of division events. Associated with peroxisomal membranes, it is recruited in part by PEX11B. May also be associated with endoplasmic reticulum tubules and cytoplasmic vesicles and found to be perinuclear.,subunit:Homotetramer; N-terminal part b
Background	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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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