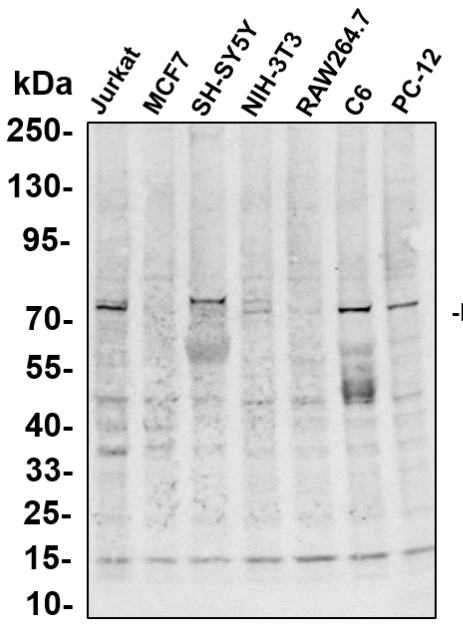
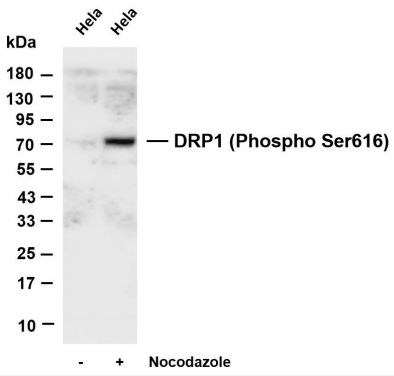
DRP1(Phospho Ser616) Rabbit mAb

Catalog No	YP-rAb-17512
Isotype	IgG
Reactivity	Human,Mouse,Rat,Bovine
Applications	WB,IF,ELISA
Gene Name	DNM1L
Protein Name	Dynamin-1-like protein
Purification Process	Protein A
Specificity	Detects endogenous levels of DRP1 only when phosphorylated at Ser616(human,mouse), Ser637(Rat). The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PAsPQ
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
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	82kD
Calculated Molecular Weight	82kD
Cell Pathway	Cytoplasm
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 binds to the C-terminal part of another DNM1L. Can self-assemble in multimeric ring-like structures. Interacts with FIS1 (By similarity). Interacts with GSK3B.,tissue specificity:Ubiquitously expressed with highest levels found in skeletal muscles, heart, kidney and brain. Isoform 1 is brain-specific while isoform 3 and isoform 4 are predominantly expressed in testis and skeletal muscles respectively. Isoform 2 is weakly expressed in brain, heart and kidney and isoform 5 is dominantly expressed in liver, heart and kidney.,
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.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4℃, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-DRP1 (Phospho Ser616) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: Hela was treated with Nocodazole(50 ng/mL) for 20 hou