Anti-DRP1 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

Catalog # M013321

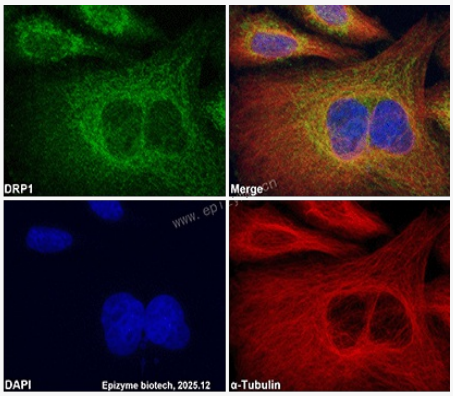
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	35K09L62
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human DRP1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-DRP1 Mouse mAb [35K09L62] is for research use only and not for use in diagnostic or therapeutic procedures.

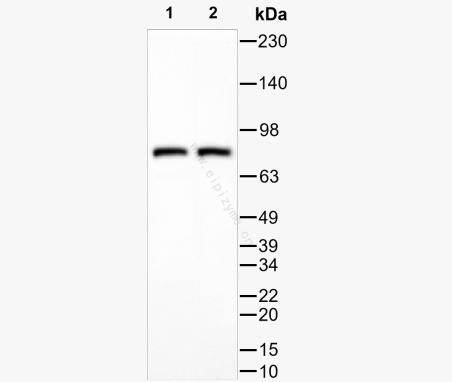
Protein Information

Synonyms	Dynamin family member proline-rich carboxyl-terminal domain less; DVLP; Dynamin-like protein IV; Dynamin-related protein 1; Dynamin-like protein; DLP1; Dymple; Dynamin-1-like protein; HdynIV; Dnm1p/Vps1p-like protein; DRP1; DNM1L; Dynamin-like protein 4.
Calculated MW	Calculated MW: 82 kDa; Observed MW: 82 kDa
Uniprot ID	O00429
Gene ID	10059
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]
Cellular Location	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 (PubMed:17606867). Localizes to mitochondria at sites of division (PubMed:15208300). 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

Validation Images



Immunofluorescence - Anti-DRP1 Mouse mAb [35K09L62]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibody: M013321 at 1:100 dilution and and α-tubulin Rabbit Monoclonal Antibody (Cat. No. LF213) at 1:100 dilution
Secondary antibody: Goat anti-Mouse (488) at 1:1,000 dilution (shown in green) and Goat anti-Rabbit (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-DRP1 Mouse mAb [35K09L62]
All lanes: M013321 at 1:1,000 dilution
Lane 1: Mouse brain whole tissue lysates
Lane 2: Rat brain whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Mouse IgG(H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution
Predicted band size: 82 kDa
Observed band size: 82 kDa
Developed using the ECL technique (Cat. No. SQ201).