

Product name:	DRP1 (phospho Ser637) Rabbit Polyclonal Antibody
Cat number:	ABN04565
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized phospho-peptide around the phosphorylation site of human DRP1 (phospho Ser637)
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:100-1:300,ELISA 1:10000-1:20000
Molecular Weight:	81kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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], catalytic activity: $\text{GTP} + \text{H}_2\text{O} = \text{GDP} + \text{phosphate}$., 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.,