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Anti-DRP1 (phospho Ser616) Rabbit mAb [09E21]

Catalog No.: A52102

Basic Information

Catalog No. (Cat.No.)	A52102
Host species	Rabbit
Reactivity	Human,Mouse,Rat,Bovine
Applications	WB,IF,ELISA
Synonyms	DRP1 (phospho Ser616),p-DRP1(Ser616),Dynamin-1-like protein,Drp1

Product Information

Target	DRP1 (phospho Ser616)
Molecular Weight(Calculated)	82 kDa
Molecular Weight(Observed)	82 kDa
Isotype	IgG,Kappa
Conjugation	NA
Concentration	0.2 mg/ml
Clonality	Monoclonal
Clone No.	09E21
RRID	NA
Storage buffer	50% Glycerol, 0.05% BSA and 0.05% preservative in PBS (pH 7.2-7.4)
Storage	Stored at -20°C for 1 year. Avoid repeated freeze / thaw cycles.
Shipped at conditions	Frozen
Form	Liquid

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Product Usage Information

Application	Dilution
WB	1:2000-1:10000
IF	1:200-1:1000
ELISA	1:5000-1:20000

Target Information

Protein Name	DRP1 (phospho Ser616)
Gene Name	*DNM1L*
Domain	NA
Background	Phospho-DRP1 (Ser616) is an activated post-translational modification form of dynamin-related protein 1 (DRP1). DRP1, encoded by the DNM1L gene, is a GTPase belonging to the dynamin superfamily and serves as a master regulator of mitochondrial and peroxisomal fission. The Ser616 residue is a key activating phosphorylation site primarily mediated by Cdk1/cyclin B. Phosphorylation at Ser616 significantly enhances DRP1 GTPase activity, promotes DRP1 oligomerization and recruitment to mitochondrial fission sites, drives mitochondrial fragmentation, and participates in cell cycle progression, mitochondrial quality control, apoptosis and autophagic metabolism. Excessive Ser616 phosphorylation causes mitochondrial over-fragmentation, triggering oxidative stress damage, metabolic dysfunction and abnormal apoptosis, which is closely associated with neurodegenerative diseases, tumor proliferation and myocardial injury.