

Rabbit DNM1L Polyclonal Antibody | anti-DNM1L antibody

DNM1L Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA166291	Rabbit	Human, Mouse, Rat	Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

DNM1L; Polyclonal Antibody; DNM1L Antibody; DLP1; DRP1; DVLP; DYMPLE; DYNIV-11; FLJ41912; HDYNIV; VPS1; anti-DNM1L antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Antigen affinity purification
Concentration	1mg/mL (varies by lot)
Sequence Length	533
Applicable Applications for anti-DNM1L antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant protein of human DNM1L
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-21804 / sc-32898
Preparation and Storage	Store at -20 degree C (regular) and -80 degree C (long term). Avoid freeze / thaw cycles.

IMAGES



IF (Immunofluorescence)

Immunofluorescence analysis of U2OS cell using DNM1L antibody. Blue: DAPI for nuclear staining.



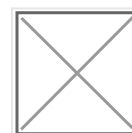
IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded rat kidney using DNM1L antibody at dilution of 1:100 (200x lens).



IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human esophageal cancer using DNM1L antibody at dilution of 1:100 (200x lens).



WB (Western Blot)

Western blot analysis of extracts of various cell lines, using DNM1L antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-DNM1L antibody	Dynamin-related protein 1 (DNM1L) is a member of the dynamin superfamily of GTPases. Members of this family have diverse cellular functions including vesicle scission, organelle fission, viral resistance, and intracellular trafficking (reviewed in 1). DNM1L affects mitochondrial morphology and is important in mitochondrial and peroxisomal fission in mammalian cells (2-5). The yeast ortholog of DNM1L clusters into a spiral-shaped structure on the mitochondrial membrane at the site of fission (reviewed in 6), and this structure is likely conserved in mammalian cells (3). The division of the mitochondria, which is required for apoptosis, as well as normal cell growth and development is controlled, in part, by the phosphorylation of DNM1L at Ser616 by Cdk1/cyclin B and at Ser637 by protein kinase A (PKA) (reviewed in 6). When phosphorylated at Ser616, DNM1L stimulates mitochondrial fission during mitosis. Conversely, fission is inhibited when DNM1L is phosphorylated at Ser637 (reviewed in 6). Dephosphorylation at Ser637 by calcineurin reverses this inhibition (7). In addition to phosphorylation, sumoylation of DNM1L is also an enhancer of mitochondrial fission (8). Balancing fission and fusion events is essential for proper mitochondrial function. Research studies have demonstrated mitochondrial defects in a variety of neurodegenerative diseases including Alzheimer's disease, Parkinson's disease, and Huntington's disease (reviewed in 6).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	510937029
NCBI GeneID	10059
NCBI Accession #	NP_001265395.1
NCBI GenBank Nucleotide #	NM_001278466.1
Molecular Weight	82,057 Da
NCBI Official Full Name	dynamin-1-like protein isoform 7
NCBI Official Synonym Full Names	dynamin 1-like
NCBI Official Symbol	DNM1L
NCBI Official Synonym Symbols	DLP1; DRP1; DVLP; EMPF; DYMPLE; HDYNIV
NCBI Protein Information	dynamin-1-like protein; Dnm1p/Vps1p-like protein; dynamin family member proline-rich carboxyl-terminal domain less; dynamin-like protein 4; dynamin-like protein IV; dynamin-related protein 1
UniProt Protein Name	Dynamin-1-like protein
UniProt Gene Name	DNM1L
UniProt Synonym Gene Names	DLP1; DRP1; DVLP; Dymple; HdynIV
UniProt Entry Name	DNM1L_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.