

DRP1 (Ab-637) Antibody

Catalog No: #33318

Package Size: #33318-1 50ul #33318-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

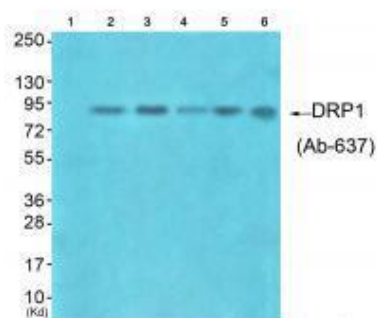
Description

Product Name	DRP1 (Ab-637) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total DNM1L protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from C-terminal of human DNM1L.
Conjugates	Unconjugated
Target Name	DRP1
Other Names	DLP1; DNM1L; Dnm1p/Vps1p-like protein; DRP1; DVLP
Accession No.	Swiss-Prot: O00429NCBI Gene ID: 10059
SDS-PAGE MW	80kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from HuvEc cells (Lane 2), HepG2 cells (Lane 3), colo cells (Lane 4), 293 cells (Lane 5) and JK cells (Lane 6), using DRP1 (Ab-637) antibody #33318. The lane on the left is treated with synthesized peptide.

Background

Functions in mitochondrial and peroxisomal division. Mediates membrane fission through oligomerization into membrane-associated tubular structures that wrap around the scission site to constrict and sever the mitochondrial membrane through a GTP hydrolysis-dependent mechanism. Through its function in mitochondrial division, ensures the survival of at least some types of postmitotic neurons, including Purkinje cells, by suppressing oxidative damage. Required for normal brain development, including that of cerebellum. Facilitates developmentally regulated apoptosis during neural tube formation. Required for a normal rate of cytochrome c release and caspase activation during apoptosis; this requirement may depend upon the cell type and the physiological apoptotic cues. Also required for mitochondrial fission during mitosis. Required for formation of endocytic vesicles. Proposed to regulate synaptic vesicle membrane dynamics through association with BCL2L1 isoform Bcl-X(L) which stimulates its GTPase activity in synaptic vesicles; the function may require its recruitment by MFF to clathrin-containing vesicles. Required for programmed necrosis execution. Isoform 1 and isoform 4 inhibit peroxisomal division when overexpressed.

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Hong Y.-R., Biochem. Biophys. Res. Commun. 249:697-703(1998).

Imoto M., J. Cell Sci. 111:1341-1349(1998).

Published Papers

el at., Deficiency of T-Cell Intracellular Antigen 1 in Murine Embryonic Fibroblasts Is Associated with Changes in Mitochondrial Morphology and Respiration. In Int J Mol Sci on 2021 Nov 26 by Isabel Carrascoso, Beatriz Ramos Velasco, et al.. PMID:34884582, , (2021)

[PMID:34884582](#)

Yuwen Liu;Jiping Liu;Naping Hu;Zhengrong Li;Anqi Liu;Ruyue Luo;Siyu Du;Dongyan Guo;Jiankang Li;Jialin Duan et al., Classical prescription Daqinjiao decoction inhibit cerebral ischemia/reperfusion induced necroptosis and ferroptosis through multiple mechanisms., , (2025)

[PMID:39736347](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.