

Product datasheet

Anti-DRP1 antibody ab54038

★ ★ ★ ★ ★ 1 Abreviews 3 References 1 图像

概述

产品名称	Anti-DRP1抗体
描述	兔多克隆抗体to DRP1
宿主	Rabbit
经测试应用	适用于: WB, IHC-P, IHC-FoFr
种属反应性	与反应: Mouse, Human 预测可用于: Hamster, Monkey
免疫原	A synthetic peptide made to an N-terminal region within residues 1-100 of the human DNM1L.
阳性对照	Human kidney lysate.

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.05% Sodium Azide Constituents: Tris glycine, 150mM Sodium chloride
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab54038** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB	★ ★ ★ ★ ★	Use a concentration of 2 µg/ml. Detects a band of approximately 81 kDa (predicted molecular weight: 82 kDa).
IHC-P		Use at an assay dependent concentration. PubMed: 25208467

应用	Ab评论	说明
IHC- FoFr		Use at an assay dependent concentration. PubMed: 20660112
靶标		
功能		<p>Functions in mitochondrial and peroxisomal division. Mediates membrane fission through oligomerization into ring-like structures which wrap around the scission site to constrict and sever the mitochondrial membrane through a GTP hydrolysis-dependent mechanism. Required for normal brain development. Facilitates developmentally-regulated apoptosis during neural tube development. Required for a normal rate of cytochrome c release and caspase activation during apoptosis. Also required for mitochondrial fission during mitosis. May be involved in vesicle transport.</p> <p>Isoform 1 and isoform 4 inhibit peroxisomal division when overexpressed.</p>
组织特异性		Ubiquitously expressed with highest levels found in skeletal muscles, heart, kidney and brain. Isoform 1 is brain-specific. Isoform 2 and isoform 3 are predominantly expressed in testis and skeletal muscles respectively. Isoform 4 is weakly expressed in brain, heart and kidney. Isoform 5 is dominantly expressed in liver, heart and kidney. Isoform 6 is expressed in neurons.
疾病相关		Note=May be associated with Alzheimer disease through beta-amyloid-induced increased S-nitrosylation of DNM1L, which triggers, directly or indirectly, excessive mitochondrial fission, synaptic loss and neuronal damage.
序列相似性		<p>Belongs to the dynamin family.</p> <p>Contains 1 GED domain.</p>
结构域		The GED domain folds back to interact, in cis, with the GTP-binding domain and middle domain, and interacts, in trans, with the GED domains of other DNM1L molecules, and is thus critical for activating GTPase activity and for DNM1L dimerization.
翻译后修饰		<p>Phosphorylation/dephosphorylation events on two sites near the GED domain regulate mitochondrial fission. Phosphorylation on Ser-637 inhibits mitochondrial fission probably through preventing intramolecular interaction. Dephosphorylated on this site by PPP3CA which promotes mitochondrial fission. Phosphorylation on Ser-616 also promotes mitochondrial fission.</p> <p>Sumoylated on various lysine residues within the B domain. Desumoylated by SENP5 during G2/M transition of mitosis. Appears to be linked to its catalytic activity.</p> <p>S-nitrosylation increases DNM1L dimerization, mitochondrial fission and causes neuronal damage.</p> <p>Ubiquitination by MARCH5 affects mitochondrial morphology.</p>
细胞定位		Cytoplasm > cytosol. Golgi apparatus. Endomembrane system. Mainly cytosolic. Translocated to the mitochondrial membrane through interaction with FIS1. Colocalized with MARCH5 at mitochondrial membrane. Localizes to mitochondria at sites of division. Associated with peroxisomal membranes, partly recruited there by PEX11B. May also be associated with endoplasmic reticulum tubules and cytoplasmic vesicles and found to be perinuclear. In some cell types, localizes to the Golgi complex.
图片		



All lanes : Anti-DRP1 antibody (ab54038) at
2 µg/ml

Lane 1 : Drp1-mut

Lane 2 : OPA1-null

Lane 3 : Double mut

Lane 4 : Mfn2-null

Lane 5 : Mfn1-null

Lane 6 : Wildtype.

Predicted band size: 82 kDa

ab54038 staining DNM1L in mouse
embryonic fibroblast post-nuclear extracts.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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