



Rabbit Anti-Mitofusin 1 antibody

SL0557R

Product Name:	Mitofusin 1
Chinese Name:	Mitochondrion融合蛋白1抗体
Alias:	Mitofusin 1; Fzo homolog; MFN 1; Mitochondrial transmembrane GTPase Fzo 1; Mitochondrial transmembrane GTPase FZO 2; Mitochondrial transmembrane GTPase FZO1B; Mitofusin 1; Mitofusin1; Putative transmembrane GTPase; Transmembrane GTPase MFN1; MFN1 HUMAN; Mitofusin-1.
文献引用 PubMed :	<p>Specific References(2) SL0557R has been referenced in 2 publications.</p> <p>[IF=1.96]Qing, Shuang-Li, et al. "The decreased expression of mitofusin-1 and increased fission-1 together with alterations in mitochondrial morphology in the kidney of rats with chronic fluorosis may involve elevated oxidative stress." Journal of Trace Elements in Medicine and Biology (2014).IHC-P;Rat. PubMed:24958380</p> <p>[IF=3.70]Ku, Tingting, et al. "PM 2.5, SO 2 and NO 2 co-exposure impairs neurobehavior and induces mitochondrial injuries in the mouse brain."Chemosphere 163 (2016): 27-34.WB;Mouse. PubMed: 27521637</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1μg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	81kDa
Cellular localization:	cytoplasmicMitochondrion
Form:	Lyophilized or Liquid

Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Mfn 1:651-741/741
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Mitofusin 1 (Mfn1) and mitofusin 2 (Mfn2) are homologs for the Drosophila protein fuzzy onion (Fzo). They are mitochondrial membrane proteins and are mediators of mitochondrial fusion. A GTPase domain is required for Mfn protein function but the molecular mechanisms of the GTPase-dependent reaction as well as the functional division of the two Mfn proteins are unknown. They are essential for embryonic development and may play a role in the pathobiology of obesity. Although the Mfn1 and Mfn2 genes are broadly expressed, they show different levels of expression in different tissues. Two Mfn1 transcripts are elevated in heart, while Mfn2 mRNA is abundantly expressed in heart and muscle tissue but present only at low levels in many other tissues. Mfn1 localizes to mitochondria and participates in at least two different high molecular weight protein complexes in a GTP-dependent manner. Purified recombinant Mfn1 exhibited approximately eightfold higher GTPase activity than Mfn2.</p> <p>Function: Essential transmembrane GTPase, which mediates mitochondrial fusion. Fusion of mitochondria occurs in many cell types and constitutes an important step in mitochondria morphology, which is balanced between fusion and fission. MFN1 acts independently of the cytoskeleton. Overexpression induces the formation of mitochondrial networks.</p> <p>Subunit: Forms homomultimers and heteromultimers with MFN2. Multimerization, which is mediated by the second coiled coil region, may play an essential role in mitochondrion fusion. Participates in a high molecular weight multiprotein complex. Interacts with VAT1.</p> <p>Subcellular Location: Cytoplasm and Mitochondrion outer membrane.</p> <p>Tissue Specificity: Ubiquitous. Expressed at slightly higher level in kidney and heart. Isoform 2 may be overexpressed in some tumors, such as lung cancers.</p> <p>Post-translational modifications: Ubiquitinated by MARCH5.</p>

Similarity:

Belongs to the mitofusin family.

SWISS:

Q8IWA4

Gene ID:

55669

Database links:

[Entrez Gene: 55669](#) Human

[Entrez Gene: 67414](#) Mouse

[Entrez Gene: 192647](#) Rat

[Omim: 608506](#) Human

[SwissProt: Q8IWA4](#) Human

[SwissProt: Q811U4](#) Mouse

[SwissProt: Q8R4Z9](#) Rat

[Unigene: 478383](#) Human

[Unigene: 290414](#) Mouse

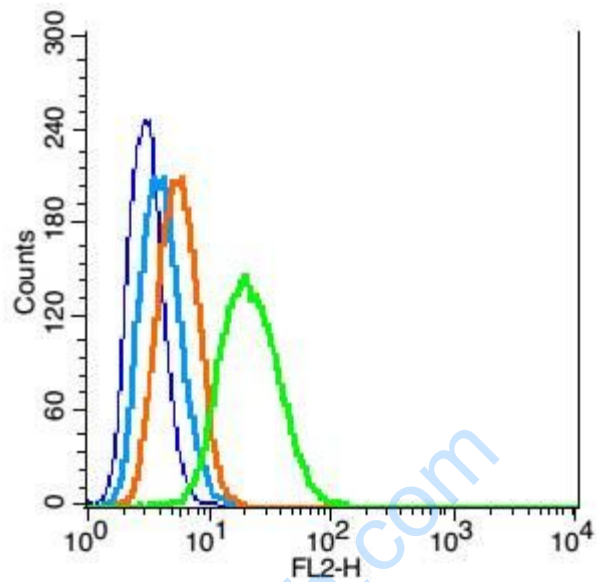
[Unigene: 160939](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Mitochondrion融合蛋白1具有促进Mitochondrion融合、抑制细胞增殖、保护细胞免于凋亡等多种功能。

Picture:



Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice.

Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ;

Primary Antibody Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA(green).