bs-0557R **[Primary Antibody]**

Mitofusin 1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 55669 **SWISS:** Q8IWA4

Target: Mitofusin 1

Immunogen: KLH conjugated synthetic peptide derived from human Mfn 1: 651-741/741.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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.

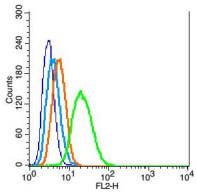
Applications: **Flow-Cyt** (1µg/Test)

Reactivity: Rat (predicted: Human, Mouse, Rabbit, Horse)

Predicted MW.: 81 kDa

Subcellular Location: Cytoplasm

VALIDATION IMAGES



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: 1µg in 100 µL1X PBS containing 0.5% BSA(green).

SELECTED CITATIONS

- **[IF=9.8]** Dongliu Luo. et al. Selenium deficiency exacerbated Bisphenol A-induced intestinal toxicity in chickens: Apoptosis and cell cycle arrest mediated by ROS/P53. SCI TOTAL ENVIRON. 2023 Dec;:169730 WB ;Chicken. 38160834
- **[IF=7.9]** Yu-Sheng Shi. et al. Dendrobine rescues cognitive dysfunction in diabetic encephalopathy by inhibiting

ferroptosis via activating Nrf2/GPX4 axis. PHYTOMEDICINE. 2023 Jul;:154993 WB ;Mouse. 37567006

- **[IF=6.513]** Zhe Li. et al. Bisphenol A aggravate selenium deficiency-induced apoptosis via miR-215-3p/Dio1 to activate ROS/PI3K/AKT pathway in chicken arterial. J CELL PHYSIOL. 2023 Apr;: WB ;Chicken. 37012668
- **[IF=6.792]** Yang Q et al. Hexavalent chromium induces mitochondrial dynamics disorder in rat liver by inhibiting AMPK/PGC-1α signaling pathway. Environ Pollut.2020 Oct;265(Pt A):114855. WB ;Rat. 32474337
- **[IF=5.895]** Xixi Wang. et al. Cannabidiol Alleviates Perfluorooctanesulfonic Acid-Induced Cardiomyocyte Apoptosis by Maintaining Mitochondrial Dynamic Balance and Energy Metabolic Homeostasis. J AGR FOOD CHEM. 2023;XXXX(XXX):XXX-XXX WB ;Mouse,Rat. 37010249