

# Mitoferrin 2 (P-12): sc-138430

## BACKGROUND

Mitoferrin 2, also known as MRS3/4 (mitochondrial RNA-splicing protein 3/4 homolog), mitochondrial iron transporter 2, NPDP016, MRS4L or SLC25A28 (solute carrier family 25 member 28), is a 364 amino acid multi-pass membrane protein of the mitochondrial inner membrane that mediates iron uptake. Mitoferrin 2 is thought to play a role in Heme synthesis of hemoproteins and iron-sulfur cluster assembly. Ubiquitously expressed, Mitoferrin 2 is found at high levels in skeletal muscle, heart, placenta, kidney, lung, liver, brain and pancreas. Mitoferrin 2 is a member of the mitochondrial carrier family and undergoes alternative splicing events to produce four isoforms. Mitoferrin 2 contains three solcar repeats and is encoded by a gene that maps to human chromosome 10q24.2.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SLC25A28 (human) mapping to 10q24.2; Slc25a28 (mouse) mapping to 19 C3.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

Mitoferrin 2 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Mitoferrin 2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138430 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Mitoferrin 2 (P-12) is recommended for detection of Mitoferrin 2 isoform 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non-cross reactive with isoforms Mitoferrin 2-2 and Mitoferrin 2-3; non cross-reactive with Mitoferrin.

Mitoferrin 2 (P-12) is also recommended for detection of Mitoferrin 2 isoform 1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Mitoferrin 2 siRNA (h): sc-90800, Mitoferrin 2 siRNA (m): sc-149448, Mitoferrin 2 shRNA Plasmid (h): sc-90800-SH, Mitoferrin 2 shRNA Plasmid (m): sc-149448-SH, Mitoferrin 2 shRNA (h) Lentiviral Particles: sc-90800-V and Mitoferrin 2 shRNA (m) Lentiviral Particles: sc-149448-V.

Molecular Weight of Mitoferrin 2 isoforms: 39/20/20 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.