# MFF (S-15): sc-168592



The Power to Question

### **BACKGROUND**

MFF (mitochondrial fission factor), also known as GL004, AD030 or AD033, is a 342 amino acid single-pass type IV membrane protein of the mitochondrial outer membrane that belongs to the tango11 family. Involved in mitochondrial and peroxisomal fission, MFF is abundantly expressed in stomach, heart, muscle, liver, brain and kidney. MFF exists as five alternatively spliced isoforms that are encoded by a gene that maps to human chromosome 2q36.3. As the second largest human chromosome, chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is due to mutations in the ALMS1 gene.

### **CHROMOSOMAL LOCATION**

Genetic locus: MFF (human) mapping to 2q36.3; Mff (mouse) mapping to 1 C5.

### **SOURCE**

MFF (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of MFF of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168592 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

### **APPLICATIONS**

MFF (S-15) is recommended for detection of MFF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

MFF (S-15) is also recommended for detection of MFF in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MFF siRNA (h): sc-94736, MFF siRNA (m): sc-149404, MFF shRNA Plasmid (h): sc-94736-SH, MFF shRNA Plasmid (m): sc-149404-SH, MFF shRNA (h) Lentiviral Particles: sc-94736-V and MFF shRNA (m) Lentiviral Particles: sc-149404-V.

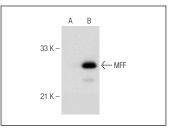
Molecular Weight of MFF isoforms: 38/33/28/25/27 kDa.

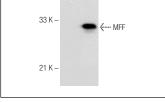
Positive Controls: MFF (m): 293T Lysate: sc-121620 or MFF (h): 293T Lysate: sc-110837.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

### **DATA**





MFF (S-15): sc-168592. Western blot analysis of MFF expression in non-transfected: sc-117752 (A) and mouse MFF transfected: sc-121620 (B) 293T whole cell liveates

MFF (S-15): sc-168592. Western blot analysis of MFF expression in non-transfected: sc-117752 (A) and human MFF transfected: sc-110837 (B) 293T whole cell lysates.

### **RESEARCH USE**

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

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **MFF (B-2):** sc-398617 or **MFF (C-11):** sc-398731, our highly recommended monoclonal alternatives to MFF (S-15).

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