

# MFF (T-14): sc-168593

## 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 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 ichthyosis, 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 (T-14) 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168593 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

MFF (T-14) 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 µg per 100-500 µg 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 (T-14) is also recommended for detection of MFF in additional species, including equine, canine 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 (predicted) of MFF: 38 kDa.

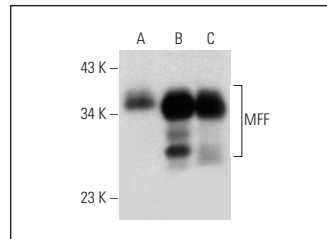
Molecular Weight (observed) of MFF: 25-39 kDa.

Positive Controls: human brain tissue, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

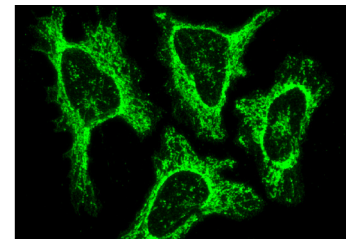
## RECOMMENDED SECONDARY REAGENTS

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 (T-14): sc-168593. Western blot analysis of MFF expression in human brain (A), mouse brain (B) and rat brain (C) tissue extracts.



MFF (T-14): sc-168593. Immunofluorescence staining of methanol-fixed HeLa cells showing mitochondrial localization.

## STORAGE

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

## PROTOCOLS

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

**MONOS**  
Satisfaction  
Guaranteed

Try **MFF (B-2): sc-398617** or **MFF (C-11): sc-398731**, our highly recommended monoclonal alternatives to MFF (T-14).