

# Metaxin 1 (P-16): sc-324118

## BACKGROUND

Metaxin 1, also known as Mtx or Gcap6, is a 317 amino acid member of the Metaxin protein family. Localized to the mitochondrion outer membrane, Metaxin 1 is involved in the transport of proteins into the mitochondrion. Metaxin 1 is also believed to be essential for embryonic development. Metaxin 1 has been found to interact with other Metaxin family members, including Metaxin 2. Although ubiquitously expressed, highest levels of Metaxin 1 are present in kidney. The gene that encodes Metaxin 1 maps to human chromosome 1, which is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome.

## REFERENCES

1. Long, G.L., et al. 1996. Structure and organization of the human metaxin gene (MTX) and pseudogene. *Genomics* 33: 177-184.
2. Collins, M. and Bornstein, P. 1996. SP1-binding elements, within the common metaxin-thrombospondin 3 intergenic region, participate in the regulation of the metaxin gene. *Nucleic Acids Res.* 24: 3661-3669.

## CHROMOSOMAL LOCATION

Genetic locus: MTX1 (human) mapping to 1q22; Mtx1 (mouse) mapping to 3 F1.

## SOURCE

Metaxin 1 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Metaxin 1 of mouse 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-324118 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Metaxin 1 (P-16) is recommended for detection of Metaxin 1 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); non cross-reactive with Metaxin 2 or Metaxin 3.

Metaxin 1 (P-16) is also recommended for detection of Metaxin 1 in additional species, including equine and bovine.

Suitable for use as control antibody for Metaxin 1 siRNA (h): sc-88250, Metaxin 1 siRNA (m): sc-149375, Metaxin 1 shRNA Plasmid (h): sc-88250-SH, Metaxin 1 shRNA Plasmid (m): sc-149375-SH, Metaxin 1 shRNA (h) Lentiviral Particles: sc-88250-V and Metaxin 1 shRNA (m) Lentiviral Particles: sc-149375-V.

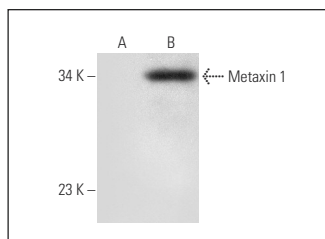
Molecular Weight of Metaxin 1: 35 kDa.

Positive Controls: Metaxin 1 (m): 293T Lysate: sc-121612.

## 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



Metaxin 1 (P-16): sc-324118. Western blot analysis of Metaxin 1 expression in non-transfected: sc-117752 (A) and mouse Metaxin 1 transfected: sc-121612 (B) 293T whole cell lysates.

## 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.

## PROTOCOLS

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



Try **Metaxin 1 (G-7): sc-514469** or **Metaxin 1 (28): sc-135989**, our highly recommended monoclonal alternatives to Metaxin 1 (P-16).