

# MOCS1 (T-14): sc-161871

## BACKGROUND

Molybdenum is an essential trace element found in most organisms that functions as a cofactor for several enzymes. Molybdenum catalyzes important transformations in carbon, nitrogen and sulfur metabolism. The Molybdenum cofactor biosynthetic pathway is evolutionarily conserved between organisms. MOCS1 (molybdenum cofactor synthesis 1), also known as molybdenum cofactor synthesis-step 1 protein A-B, cell migration-inducing gene 11 protein, MOCOD or MIG11, is a 636 amino acid protein that exists as 8 widely expressed isoforms, 2 of which (designated MOCS1A and MOCS1B) form a heterooligomer. MOCS1 plays a role in molybdenum cofactor and molybdopterin biosynthesis, and mutations in the MOCS1 gene are linked to an autosomal recessive disease known as molybdenum cofactor deficiency type A (MOCOD type A), which is characterized by early childhood death, neurological damage and neonatal seizures.

## CHROMOSOMAL LOCATION

Genetic locus: MOCS1 (human) mapping to 6p21.2; Mocs1 (mouse) mapping to 17 C.

## SOURCE

MOCS1 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MOCS1 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-161871 P, (100 µg 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

MOCS1 (T-14) is recommended for detection of MOCS1 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 MOCS2 or MOCS3.

MOCS1 (T-14) is also recommended for detection of MOCS1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MOCS1 siRNA (h): sc-95639, MOCS1 siRNA (m): sc-149495, MOCS1 shRNA Plasmid (h): sc-95639-SH, MOCS1 shRNA Plasmid (m): sc-149495-SH, MOCS1 shRNA (h) Lentiviral Particles: sc-95639-V and MOCS1 shRNA (m) Lentiviral Particles: sc-149495-V.

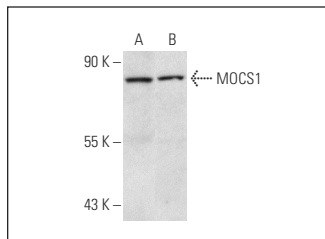
Molecular Weight of MOCS1: 70 kDa.

Positive Controls: T24 cell lysate: sc-2292 or mouse liver extract: sc-2256.

## 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



MOCS1 (T-14): sc-161871. Western blot analysis of MOCS1 expression in mouse liver tissue extract (A) and T24 whole cell lysate (B).

## 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.


 MONOS  
Satisfaction  
Guaranteed

Try **MOCS1 (G-6): sc-398094**, our highly recommended monoclonal alternative to MOCS1 (T-14).