

# MAMLD1 (K-14): sc-131477

## BACKGROUND

MAMLD1 (mastermind-like domain-containing protein 1), also known as CXorf6, CG1 or F18, is a 701 amino acid member of the mastermind family of proteins. Expressed in brain, heart and skeletal muscle, MAMLD1 co-localizes with MAML2 (mastermind-like protein 2) to nuclear bodies and is thought to function as a transcriptional co-activator that enhances promoter function. Via its ability to promote transcription, MAMLD1 may regulate testosterone production, possibly playing a role in developmental events, such as spermatogenesis. Defects in the gene encoding MAMLD1 are the cause of X-linked hypospadias, a complex disorder in which the urethra opens on the central side of the penis. Multiple isoforms of MAMLD1 exist due to alternative splicing.

## REFERENCES

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- Tsai, T.C., et al. 2005. Characterization of MTM1 mutations in 31 Japanese families with myotubular myopathy, including a patient carrying 240 kb deletion in Xq28 without male hypogonadism. *Neuromuscul. Disord.* 15: 245-252.
- Fukami, M., et al. 2006. CXorf6 is a causative gene for hypospadias. *Nat. Genet.* 38: 1369-1371.
- O'Shaughnessy, P.J., et al. 2007. Developmental changes in human fetal testicular cell numbers and messenger ribonucleic acid levels during the second trimester. *J. Clin. Endocrinol. Metab.* 92: 4792-4801.
- Fukami, M., et al. 2008. Mastermind-like domain-containing 1 (MAMLD1 or CXorf6) transactivates the HES3 promoter, augments testosterone production, and contains the SF1 target sequence. *J. Biol. Chem.* 283: 5525-5532.

## CHROMOSOMAL LOCATION

Genetic locus: MAMLD1 (human) mapping to Xq28; Mamld1 (mouse) mapping to X A7.2.

## SOURCE

MAMLD1 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MAMLD1 of human origin.

## STORAGE

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

## 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-131477 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MAMLD1 (K-14) is recommended for detection of MAMLD1 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).

MAMLD1 (K-14) is also recommended for detection of MAMLD1 in additional species, including equine.

Suitable for use as control antibody for MAMLD1 siRNA (h): sc-91240, MAMLD1 siRNA (m): sc-149241, MAMLD1 shRNA Plasmid (h): sc-91240-SH, MAMLD1 shRNA Plasmid (m): sc-149241-SH, MAMLD1 shRNA (h) Lentiviral Particles: sc-91240-V and MAMLD1 shRNA (m) Lentiviral Particles: sc-149241-V.

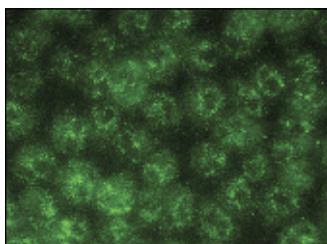
Molecular Weight of MAMLD1: 74 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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.

## DATA



MAMLD1 (K-14): sc-131477. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization

## RESEARCH USE

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