

# Goat Anti-MAD4 / MXD4 Antibody

Peptide-affinity purified goat antibody Catalog # AF1645a

### Specification

## Goat Anti-MAD4 / MXD4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB <u>Q14582</u> <u>NP\_006445</u>, <u>10608</u> Human Goat Polyclonal 100ug/200ul IgG 23528

# Goat Anti-MAD4 / MXD4 Antibody - Additional Information

### Gene ID 10608

**Other Names** 

Max dimerization protein 4, Max dimerizer 4, Class C basic helix-loop-helix protein 12, bHLHc12, Max-associated protein 4, Max-interacting transcriptional repressor MAD4, MXD4, BHLHC12, MAD4

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

Goat Anti-MAD4 / MXD4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Goat Anti-MAD4 / MXD4 Antibody - Protein Information

Name MXD4

Synonyms BHLHC12, MAD4

#### Function

Transcriptional repressor. Binds with MAX to form a sequence- specific DNA-binding protein complex which recognizes the core sequence 5'-CAC[GA]TG-3'. Antagonizes MYC transcriptional activity by competing for MAX and suppresses MYC dependent cell transformation (By similarity).



Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}.

# Goat Anti-MAD4 / MXD4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Goat Anti-MAD4 / MXD4 Antibody - Images



AF1645a staining (0.5 μg/ml) of human kidney lysate (RIPA buffer, 35 μg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

### Goat Anti-MAD4 / MXD4 Antibody - Background

This gene is a member of the MAD gene family . The MAD genes encode basic helix-loop-helix-leucine zipper proteins that heterodimerize with MAX protein, forming a transcriptional repression complex. The MAD proteins compete for MAX binding with MYC, which heterodimerizes with MAX forming a transcriptional activation complex. Studies in rodents suggest that the MAD genes are tumor suppressors and contribute to the regulation of cell growth in differentiating tissues.

# Goat Anti-MAD4 / MXD4 Antibody - References

c-Myc creates an activation loop by transcriptionally repressing its own functional inhibitor, hMad4, in young fibroblasts, a loop lost in replicatively senescent fibroblasts. Marcotte R, et al. J Cell Biochem, 2005 Dec 1. PMID 16167342.

Yeast two-hybrid identification of prostatic proteins interacting with human sex hormone-binding globulin. Pope SN, et al. J Steroid Biochem Mol Biol, 2005 Feb. PMID 15862967.



Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Hillier LW, et al. Nature, 2005 Apr 7. PMID 15815621.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.

Human liver specific transcriptional factor TCP10L binds to MAD4. Jiang DJ, et al. J Biochem Mol Biol, 2004 Jul 31. PMID 15469726.