# SANTA CRUZ BIOTECHNOLOGY, INC.

# MAWDBP (S-14): sc-168555



## BACKGROUND

MAWDBP (MAWD binding protein), also known as PBLD (phenazine biosynthesis-like protein domain containing) or MAWBP, is a 288 amino acid protein that belongs to the phenazine biosynthesis-like protein (phzF) family. It has been suggested that MAWDBP is the only representative of the phzF family in the human genome. Expressed in most tissues, MAWDBP is a WD-40 repeat-containing β-propeller protein believed to participate in the MAPK signaling pathway. Involved in multiple basic cellular functions, expression of MAWDBP is elevated in several disease processes, including Insulin resistance, folate deficiency and hypotension. It is thought that MAWDBP may also be involved in carcinogenesis.

# REFERENCES

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- 3. Parsons, J.F., et al. 2004. Structure and function of the phenazine biosynthesis protein PhzF from *Pseudomonas fluorescens* 2-79. Biochemistry 43: 12427-12435.
- 4. Blankenfeldt, W., et al. 2004, Structure and function of the phenazine biosynthetic protein PhzF from Pseudomonas fluorescens. Proc. Natl. Acad. Sci. USA 101: 16431-16436.
- 5. Solomon, S.S., et al. 2005. Proteome of H-411E (liver) cells exposed to Insulin and tumor necrosis factor- $\alpha$ : analysis of proteins involved in Insulin resistance. J. Lab. Clin. Med. 145: 275-283.
- 6. Chanson, A., et al. 2005. Proteomic analysis reveals changes in the liver protein pattern of rats exposed to dietary folate deficiency. J. Nutr. 135: 2524-2529.
- 7. Liger, D., et al. 2005. Crystal structure of YHI9, the yeast member of the phenazine biosynthesis PhzF enzyme superfamily. Proteins 60: 778-786.
- 8. Herde, P., et al. 2006. The purification, crystallization and preliminary structural characterization of human MAWDBP, a member of the phenazine biosynthesis-like protein family. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 62: 546-549.
- 9. Kim, S.W., et al. 2008. Proteomic and transcriptomic analysis for streptozotocin-induced diabetic rat pancreas in response to fungal polysaccharide treatments. Proteomics 8: 2344-2361.

## CHROMOSOMAL LOCATION

Genetic locus: PBLD (human) mapping to 10q21.3; Pbld1 (mouse) mapping to 10 B4.

## SOURCE

MAWDBP (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAWDBP of human origin.

# PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168555 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

MAWDBP (S-14) is recommended for detection of MAWDBP 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).

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

Suitable for use as control antibody for MAWDBP siRNA (h): sc-90834, MAWDBP siRNA (m): sc-149300, MAWDBP shRNA Plasmid (h): sc-90834-SH, MAWDBP shRNA Plasmid (m): sc-149300-SH, MAWDBP shRNA (h) Lentiviral Particles: sc-90834-V and MAWDBP shRNA (m) Lentiviral Particles: sc-149300-V.

Molecular Weight of MAWDBP: 32 kDa.

Positive Controls: c4 whole cell lysate: sc-364186.

## **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<sup>™</sup> Mounting Medium: sc-24941.

#### **STORAGE**

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.