

# MAWDBP (1): sc-101502

## 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  $\beta$ -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

- Mavrodi, D.V., et al. 2004. The purification, crystallization and preliminary structural characterization of PhzF, a key enzyme in the phenazine-biosynthesis pathway from *Pseudomonas fluorescens* 2-79. *Acta Crystallogr. D Biol. Crystallogr.* 60: 184-186.
- Parsons, J.F., et al. 2004. Structure of the phenazine biosynthesis enzyme PhzG. *Acta Crystallogr. D Biol. Crystallogr.* 60: 2110-2113.
- Parsons, J.F., et al. 2004. Structure and function of the phenazine biosynthesis protein PhzF from *Pseudomonas fluorescens* 2-79. *Biochemistry* 43: 12427-12435.
- 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.
- 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.

## CHROMOSOMAL LOCATION

Genetic locus: PBLD (human) mapping to 10q21.3; Pbl1 (mouse) mapping to 10 B4.

## SOURCE

MAWDBP (1) is a mouse monoclonal antibody raised against recombinant MAWDBP of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MAWDBP (1) is available conjugated to agarose (sc-101502 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-101502 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-101502 PE), fluorescein (sc-101502 FITC), Alexa Fluor<sup>®</sup> 488 (sc-101502 AF488), Alexa Fluor<sup>®</sup> 546 (sc-101502 AF546), Alexa Fluor<sup>®</sup> 594 (sc-101502 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-101502 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-101502 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-101502 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

MAWDBP (1) is recommended for detection of MAWDBP of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

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.

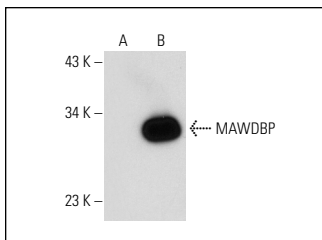
Molecular Weight of MAWDBP: 32 kDa.

Positive Controls: MAWDBP (h): 293 Lysate: sc-111233 or c4 whole cell lysate: sc-364186.

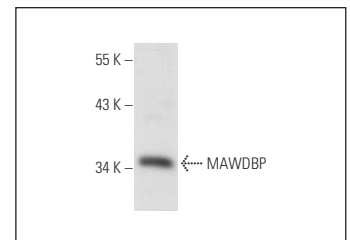
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



MAWDBP (1): sc-101502. Western blot analysis of MAWDBP expression in non-transfected: sc-110760 (A) and human MAWDBP transfected: sc-111233 (B) 293 whole cell lysates.



MAWDBP (1): sc-101502. Western blot analysis of MAWDBP expression in c4 whole cell lysate.

## SELECT PRODUCT CITATIONS

- Wu, J., et al. 2019. Novel compound cedrelone inhibits hepatocellular carcinoma progression via PBLD and Ras/Rap1. *Exp. Ther. Med.* 18: 4209-4220.

## 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.