

# MTBP Antibody

Catalog # ASC10139

### Specification

# MTBP Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Application Notes WB, IF, ICC, E <u>Q96DY7</u> NP\_071328, 21630257 Human Rabbit Polyclonal IgG 104 kDa KDa MTBP antibody can be used for detection of MTBP by Western blot at 1 μg/mL. A 104 kDa band can be detected. Antibody can also be used for immunocytochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

### MTBP Antibody - Additional Information

Gene ID 27085 Other Names MTBP Antibody: MDM2BP, Mdm2-binding protein, hMTBP, Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) binding protein, 104kDa

Target/Specificity MTBP;

#### **Reconstitution & Storage**

MTBP antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions** MTBP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **MTBP Antibody - Protein Information**

#### Name MTBP

#### Function

Inhibits cell migration in vitro and suppresses the invasive behavior of tumor cells (By similarity). May play a role in MDM2- dependent p53/TP53 homeostasis in unstressed cells. Inhibits autoubiquitination of MDM2, thereby enhancing MDM2 stability. This promotes MDM2-mediated ubiquitination of p53/TP53 and its subsequent degradation.



# MTBP 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>

# **MTBP Antibody - Images**



Western blot analysis of MTBP expression in K562 whole cell lysates with MTBP antibody at 1  $\mu g$  /ml.



Immunocytochemistry of MTBP in K562 cells with MTBP antibody at 5  $\mu$ g/mL.





Immunofluorescence of MTBP in K562 cells with MTBP antibody at 20  $\mu$ g/mL.

### MTBP Antibody - Background

MTBP Antibody: The p53 tumor-suppressor gene integrates numerous signals that control cell life and death. Several novel molecules involved in p53 network, including Chk2, p53R2, p53AIP1, Noxa, PIDD, PID/MTA2 and MTBP, were recently discovered. The transcriptional activity of p53 is modulated by posttranslational regulations of the p53 protein including stabilization and acetylation. P53 transcriptionally activates MDM2 gene then the translated MDM2 protein binds to p53 and promotes the degradation of p53 leading to lowering the concentration of p53 protein. MDM2 inhibits both p53 mediated G1 arrest and apoptosis. A recently discovered protein termed MTBP was found to bind to MDM2 and to inhibit the modulation effect of MDM2 on p53. MTBP is expressed in a variety of normal tissues.

### MTBP Antibody - References

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Tanaka H, Arakawa H, Yamaguchi T, Shiraishi K, Fukuda S, Matsui K, Takei Y, Nakamura Y. A ribonucleotide reductase gene involved in a p53-dependent cell-cycle checkpoint for DNA damage. Nature. 2000;404:42-9.

Oda E, Ohki R, Murasawa H, Nemoto J, Shibue T, Yamashita T, Tokino T, Taniguchi T, Tanaka N. Noxa, a BH3-only member of the Bcl-2 family and candidate mediator of p53-induced apoptosis. Science. 2000;288(5468):1053-8.

Oda K, Arakawa H, Tanaka T, Matsuda K, Tanikawa C, Mori T, Nishimori H, Tamai K, Tokino T, Nakamura Y, Taya Y. p53AIP1, a potential mediator of p53-dependent apoptosis, and its regulation by Ser-46-phosphorylated p53. Cell. 2000 Sep 15;102(6):849-62.