

Anti-MTBP (Ascites) (MOUSE) Monoclonal Antibody MTBP Antibody Catalog # ASR5059

Specification

Anti-MTBP (Ascites) (MOUSE) Monoclonal Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Mouse Unconjugated Human Human Monoclonal WB, E, I, LCI This antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band ~ 110 kDa in size corresponding to MTBP by western blotting in the appropriate cell lysate or extract.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This monoclonal antibody was produced by repeated immunizations with a recombinant amino-terminal HIS _{6x} -tagged polypeptide corresponding to amino acid residues 667-812 of human MTBP protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-MTBP (Ascites) (MOUSE) Monoclonal Antibody - Additional Information

Gene ID 27085

Other Names 27085

Purity

This antibody is directed against human MTBP protein. The product was produced from clarified mouse ascetic fluid. A BLAST analysis was used to suggest reactivity with this protein from human (100% homology) and chimpanzee. Cross reactivity with MTBP protein from mouse (77% homology) and chicken (79% homology) is unlikely due to the relatively low number of positive residues and high number of gaps within this sequence. Cross reactivity with MTBP homologues from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.



Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-MTBP (Ascites) (MOUSE) Monoclonal 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.

Anti-MTBP (Ascites) (MOUSE) Monoclonal 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>

Anti-MTBP (Ascites) (MOUSE) Monoclonal Antibody - Images



Western blot using Rockland's anti-MTBP antibody shows detection of a band ~110 kDa corresponding to human MTBP (arrowhead). Lanes represent human 293 cell lysates with (+) and without (-) transfection with a full-length human expression MTBP construct. The transfected cell extract was diluted 30 fold in extract lacking transfected MTBP. Proteins were separated by SDS-PAGE and transferred onto PDVF membrane. After blocking, the membrane was probed with the primary antibody diluted to 1:500 for 2h at room temperature followed by detection using a Lumi-LightPlus Western Blotting Kit (Roche).

Anti-MTBP (Ascites) (MOUSE) Monoclonal Antibody - Background

The MDM2 onco-protein is over expressed in human cancer cells and it promotes tumorigenesis by



directly blocking the function of the p53 tumor suppressor. Studies also indicate that MDM2 regulates cell proliferation via p53 independent mechanisms. MTBP (Mdm2 [Two] Binding Protein) was identified by a yeast two-hybrid screen as an MDM2 binding protein (1). MTBP has been reported to modulate cell cycle progression by a p53 independent mechanism and suppress MDM2-mediated p53 degradation when ectopically expressed in cells (1,2). The human MTBP gene localizes to 8q24 (3) and MTBP RNA is expressed in a wide range of tissues, with highest being in the thymus, testes and ovaries (1).