

Product datasheet for AM00224SU-N

OriGene Technologies, Inc.

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MDM2 (154-167) Mouse Monoclonal Antibody [Clone ID: SMP14]

Product data:

Product Type: Primary Antibodies

Clone Name: SMP14
Applications: IHC, WB

Recommended Dilution: Immunohistochemistry on Formalin-Fixed, Paraffin-Embedded Sections: 1/50-1/100

Pretreatment of deperaffinized tissue with heat-induced epitope retrieval is recommended.

Use Polymer anti Mouse/Rabbit IgG as a detection system.

Positive Control: Liposarcoma.

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: A Synthetic peptide corresponding to amino acids 154-167 of Human MDM2 protein.

Specificity: This antibody recognizes the 90kD MDM2 protein, which forms a complex with p53 leading to

p53 inhibition. May also acts to stimulate cell proliferation via its induction of transcription

factors such as E2F1 and DPI.

MDM2 is over expressed in a range of human malignancies, including soft tissue sarcomas,

breast cancer and bladder cancer. *Cellular Localization:* Nuclear.

Formulation: State: Supernatant

State: Liquid Tissue Culture Supernatant with 0.2% BSA and 15mM Sodium Azide.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C. Stability: Shelf life: one year from despatch.

Gene Name: MDM2 proto-oncogene

Database Link: Entrez Gene 361725 RatEntrez Gene 4193 Human

Q00987





Background:

p53 is the most commonly mutated gene in human cancer identified to date. Expression of p53 leads to inhibition of cell growth by preventing progression of cells from G1 to S phase of the cell cycle. Most importantly, p53 functions to cause arrest of cells in the G1 phase of the cell cycle following any exposure of cells to DNA-damaging agents. The MDM2 (murine double minute-2) protein was initially identified as an oncogene in a murine transformation system. MDM2 functions to bind p53 and block p53-mediated transactivation of cotransfected reporter constructs. The MDM2 gene is amplified in a high percentage of human sarcomas that retain wt p53 and tumor cells that overexpress MDM2 can tolerate high levels of p53 expression. These findings argue that MDM2 overexpression represents at least one mechanism by which p53 function can be abrogated during tumorigenesis. MDM2 is useful in differentiating liposarcoma from other types of sarcomas.

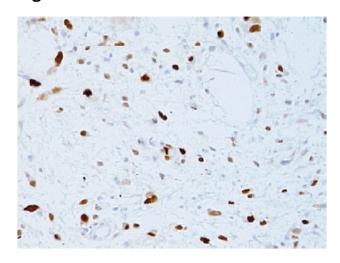
Synonyms:

p53-binding protein Mdm2, Oncoprotein Mdm2, Double minute 2 protein, Hdm2

Note:

Predicted Molecular Weight: 55 kDa.

Product images:



Formalin-Fixed, Paraffin-Embedded Human dedifferentiated liposarcoma stained with MDM2 antibody Cat.-No. AM00224SU-N using peroxidase conjugate and DAB chromogen. Note the nuclear staining of tumor cells.