

Mouse anti-MDM2 (Murine Double Minute-2)

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| Cat. No.: | 113-0230 |
| Size: | 50 µg |
| Type: | Monoclonal Mouse Antibody |
| Clone: | 3G187 (same as IF2) |
| Isotype: | IgG2b kappa |
| Form: | Supplied as a liquid in PBS, pH 7.4, 1mg/ml BSA, 30% glycerol, 0.05% sodium azide. |
| Concentration: | 0.5 mg/ml |
| Purity: | Purified by protein A affinity chromatography. |
| Immunogen: | Synthetic peptide corresponding to the N-terminus of human MDM2 |

Specificity

Recognizes human MDM2 protein.

Description

The MDM2 (murine double minute 2) proto-oncogene was originally identified as an amplified gene in a mouse tumor cell line. Overexpression of MDM2 was shown to produce tumors in athymic mice. In a separate set of studies, the 90kD MDM2 was found to bind and inactivate the transcriptional activity of the p53 protein. p53 was also identified as the major target for MDM2 during embryonic development by virtue of the fact that the lethal effects produced by knocking out MDM2 could be reversed by the simultaneous deletion of p53. The MDM2 gene itself is a transcriptional target for p53, and induction of p53 transcriptional activity results in increased MDM2 mRNA and protein levels. It appears that a MDM2 p53 feedback loop serves to keep the growth suppressive functions of p53 in check during the normal cell cycle. Recent studies have implicated MDM2 in regulating cell proliferation via p53-independent pathways. This is based on evidence that MDM2 can interact with Rb, E2F-1 and DP1.

Applications and Recommended Dilutions

Suitable for use in Immunofluorescence, Western Blot, Immunoprecipitation, Immunocytochemistry and Immunohistochemistry. Other applications not tested.

Immunofluorescence: 1 – 2 µg/ml

Western Blot: 2 – 3 µg/ml (ECL)

Immunocytochemistry: 1 – 2 µg/ml

Immunohistochemistry (formalin-fixed, paraffin-embedded): 1 – 5 µg/ml. Staining requires heat induced epitope retrieval (HIER) pretreatment.

Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

References

1. Leach, F. S., et al, Cancer Res. 53:2231–2234 (1993).
2. Oliner, J.D. et. al., Nature, 358: 80–83 (1992).
3. Momand, J. et al, Cell, 69: 1237–1245 (1992).
4. Barak, Y., et al, EMBO J. 12:461–8 (1993).
5. Marchetti, A., et al, J. Pathol. 175: 31–38 (1995).
6. Cahilly-Snyder, L., et al., Somat. Cell Mol. Genet. 13:235–234 (1987).
7. Fakharzadeh, S. et al, EMBO J., 10:1565–1569 (1991).
8. Haines, D.S., et. al., Leuk. Lymphoma 26:227–238 (1997).
9. Momand, J., et al., Nucleic Acids Res. 26:3453–3459 (1998).
10. Oliner, J.D., et al., Nature 362:857–60 (1993).

- Intended for research use only. Not for use in human, therapeutic, or diagnostic applications. -

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