

**Mouse Anti-MDM2 [SMP14]: MC0548, MC0548RTU7**

**Intended Use:** For Research Use Only

**Description:** 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.

**Specifications**

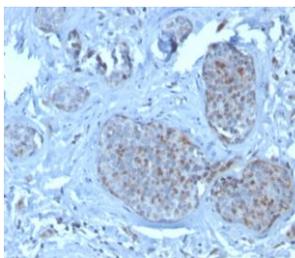
Clone: SMP14  
Source: Mouse  
Isotype: IgG1k  
Reactivity: Human, mouse, rat  
Immunogen: Synthetic peptide aa 154-167 of human MDM2 protein  
Localization: Nucleus  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA, WB  
Package:

| Description       | Catalog No. | Size |
|-------------------|-------------|------|
| MDM2 Concentrated | MC0548      | 1 ml |
| MDM2 Prediluted   | MC0548RTU7  | 7 ml |

**IHC Procedure\***

Positive Control Tissue: Breast Carcinoma, liposarcoma  
Concentrated Dilution: 50-200  
Pretreatment: Tris EDTA pH 9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human breast carcinoma stained with anti-MDM2 using DAB

**References:**

1. Challenging dedifferentiated liposarcoma identified by MDM2-amplification, a report of two cases. Lokka S, et al. BMC Clin Pathol. Jul 28;14:36, 2014.
2. Selected immunohistochemical features of conventional renal cell carcinomas coexpressing P53 and MDM2. Hejnold M, et al. Pol J Pathol. Jun;65(2):113-9, 2014.
3. MDM2 is a useful prognostic biomarker for resectable gastric cancer. Ye Y, et al. Cancer Sci. May;104(5):590-8, 2013.
4. Combined p53 and MDM2 biomarker analysis shows a unique pattern of expression associated with poor prognosis in patients with renal cell carcinoma undergoing radical nephrectomy. Noon AP, et al. BJU Int. Apr;109(8):1250-7, 2012.
5. MDM2 mRNA expression in the p53 pathway may predict the potential of invasion and liver metastasis in colorectal cancer. Kondo I, et al. Dis Colon Rectum. Sep;51(9):1395-402, 2008.