# p53 Tumor Suppressor Protein Antibody

Mouse Monoclonal Antibody [Clone SPM349]

| Catalog No | Format | Size |
|---|---|---|
| 7157-MSM7X-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 7157-MSM7X-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 7157-MSM7X-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

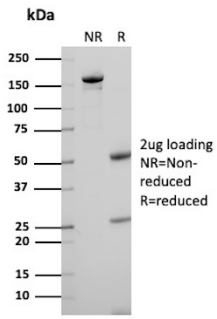
| Applications | Tested Dillution | Note |
|---|---|---|
| Flow Cytometry (Flow) | 1-2ug/million cells | |
| Immunofluorescence (IF) | 1-3ug/ml | |
| Immunohistochemistry (IHC) | 1-2ug/ml | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB) | 2-4ug/ml | |

## Product Details

| | |
|---|---|
| **Clone** | SPM349 |
| **Gene Name** | TP53 |
| **Immunogen** | Gel-Purified p53-beta-galactosidase fusion protein containing murine p53 from aa 14-389 |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype / Light Chain** | IgG1 / Kappa |
| **Mol. Weight of Antigen** | 53kDa. |
| **Cellular Localization** | Centrosome, Cytoplasm, Cytoskeleton, Endoplasmic reticulum, Microtubule organizing center, Mitochondrion matrix, Nucleus, PML body |
| **Species Reactivity** | Cow, Dog, Hamster, Human, Monkey, Mouse, Rat |
| **Positive Control** | MDA-MB-231 or A431 cells. Breast or Colon carcinoma. |

**Optimal dilution for a specific application should be determined.*

## Product Images for p53 Tumor Suppressor Protein Antibody




SDS-PAGE Analysis of Purified Cellular tumor antigen p53 Recombinant Mouse Monoclonal Antibody (SPM349). Confirmation of Purity and Integrity of Antibody.

## Specificity & Comments

The specificity of this monoclonal antibody to its intended target was tested by HuProtTM Array, containing more than 19,000, full-length human proteins. SPM349 binds to the C-terminus (aa213-217) of both wild type and mutated p53. Mutation and/or allelic loss of p53 is one of the causes of a variety of mesenchymal and epithelial tumors. If it occurs in the germ line, such tumors run in families. p53 Binds to a DNA consensus sequence, the p53 response element, and it regulates normal cell growth cycle events by activating transcription of genes, involved either in progression through the cycle, or causing arrest in G1 when the genome is damaged. In most transformed and tumor cells the concentration of p53 is increased 51000 fold over the minute concentrations (1000 molecules cell) in normal cells, principally due to the increased half-life (4 h) compared to that of the wild-type (20 min). p53 Localizes in the nucleus, but is detectable at the plasma membrane during mitosis and when certain mutations modulate cytoplasmic/nuclear distribution. p53 Is the most commonly mutated gene in spontaneously occurring human cancers. Mutations arise with an average frequency of 70% but incidence varies from zero in carcinoid lung tumors to 97% in primary melanomas. High concentrations of p53 protein are transiently expressed in human epidermis and superficial dermal fibroblasts following mild ultraviolet irradiation.

## Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Research Areas

AKT Signaling, Bladder Cancer, Breast Cancer, Cardiovascular, Colon Cancer, Cytokine Signaling, Defective Intrinsic Apoptosis, Immunology, Infectious Disease, Lung Cancer, MAPK Signaling, Nuclear Marker, Ovarian Cancer, Signal Transduction, Transcription Factors

## Limitations and Warranty