

## Recombinant p53 Tumor Suppressor Protein Antibody

Mouse Monoclonal Antibody [Clone rBP53-12]

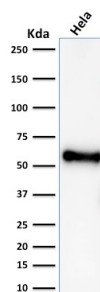
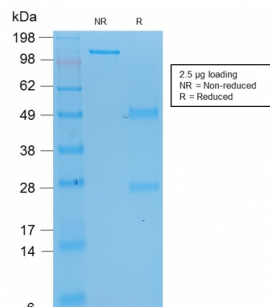
Catalog No	Format	Size
7157-MSM18-P0	Purified Ab with BSA and Azide	200ug/ml
7157-MSM18-P1	Purified Ab with BSA and Azide	200ug/ml
7157-MSM18-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

Product Details	
Clone	rBP53-12
Gene Name	TP53
Immunogen	Recombinant human wild-type p53 protein
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	Chicken, Dog, Hamster, Human, Monkey
Positive Control	MDA-MB-231 cells. HeLa cell lysate. Breast or colon carcinoma.

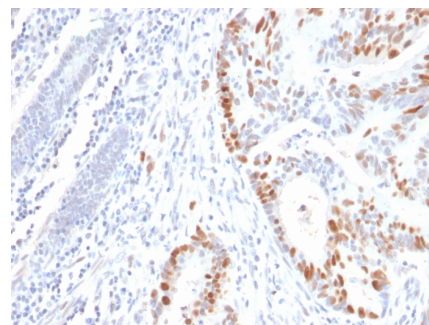
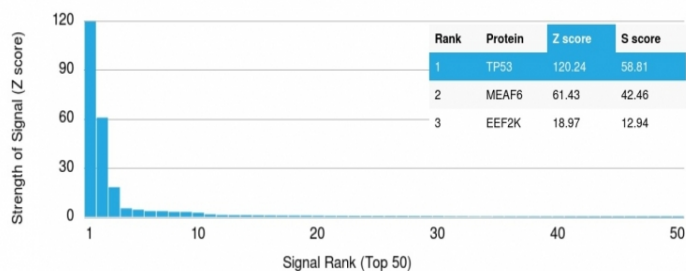
\*Optimal dilution for a specific application should be determined.

### Product Images for Recombinant p53 Tumor Suppressor Protein Antibody



SDS-PAGE Analysis of Purified p53 Mouse Recombinant Monoclonal Antibody (rBP53-12). Confirmation of Integrity and Purity of Antibody.

Western Blot Analysis of HeLa cell lysate using p53 Mouse Recombinant Monoclonal Antibody (rBP53-12).



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with p53 Mouse Recombinant Monoclonal Antibody (rBP53-12).

Analysis of Protein Array containing more than 19,000 full-length human proteins using p53 Recombinant Mouse Monoclonal Antibody (rBP53-12). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

## Specificity & Comments

This MAb reacts with an N-terminal epitope (aa 16-25) 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. 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. 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. Positive nuclear staining with p53 antibody has been reported to be a negative prognostic factor in breast carcinoma, lung carcinoma, colorectal, and urothelial carcinoma. Anti-p53 positivity has also been used to differentiate uterine serous carcinoma from endometrioid carcinoma as well as to detect intratubular germ cell neoplasia.

## Research Areas

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

## Known Applications & Suggested Dilutions

Western Blot (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes 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) | Optimal dilution for a specific application should be determined.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## 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.