## Anti-p53 Antibody [rBP53-12] - BSA and Azide free (A253356)

## Specifications:

| Name: | Anti-p53 Antibody [rBP53-12] - BSA and Azide free |
| :---: | :---: |
| Description: | Recombinant mouse monoclonal [rBP53-12] antibody to p53. |
| Specificity: | This antibody 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. |
| Applications: | WB, IHC-P |
| Recommended Dilutions: | WB: $1-2 \mu \mathrm{~g} / \mathrm{ml}$, IHC-P: $1-2 \mu \mathrm{~g} / \mathrm{ml}$ |
| Reactivity: | Human, Monkey, Canine, Hamster, Chicken |
| Cross Reactivity: | This antibody does not cross react with Mouse or Rat. |
| Immunogen: | Recombinant human wild type p53 protein. |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Clone ID: | rBP53-12 |
| Isotype: | lgG1 |
| Light Chains: | kappa |
| Conjugate: | Unconjugated |
| Purification: | Protein A/G chromatography. |
| Concentration: | $1 \mathrm{mg} / \mathrm{ml}$ |
| Product Form: | Liquid |

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## Specifications continued:

Formulation:
Storage:
General Notes:

Disclaimer:

Supplied in 10 mM Phosphate Buffered Saline; without Sodium Azide and carrier free.
Shipped at $4^{\circ} \mathrm{C}$. Upon delivery aliquot and store at $-20^{\circ} \mathrm{C}$. Avoid freeze / thaw cycles.
This monoclonal antibody is also available in a different formulation with BSA and Sodium Azide - Anti-p53 Antibody [rBP53-12] (A250176).

This product is for research use only. It is not intended for diagnostic or therapeutic use.

Images:


Immunohistochemical analysis of formalin-fixed, paraffin-embedded human colon carcinoma using Anti-p53 Antibody [rBP53-12].


SDS-PAGE analysis of Anti-p53 Antibody [rBP53-12] under non-reduced and reduced conditions; showing intact IgG and intact heavy and light chains, respectively. SDS-PAGE analysis confirms the integrity and purity of the antibody.

Western blot analysis of HeLa cell lysate using Anti-p53 Antibody [rBP53-12].

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## Images continued:



Analysis of protein array containing more than 19,000 full-length human proteins using Anti-p53 Antibody [rBP53-12]. Z-Score 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 HuProtTM 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 HuProtTM 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.

