

Recombinant TP53 Antibody (N-Terminal Region) [clone rBP53-12] (V3647)

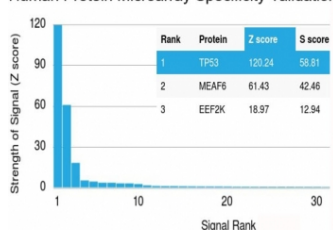
Catalog No.	Formulation	Size
V3647-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3647-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3647SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3647IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Recombinant **MOUSE MONOCLONAL**

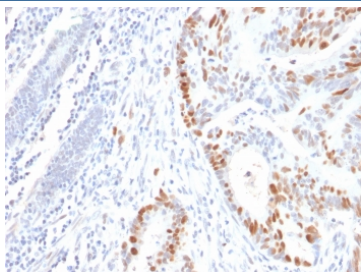
[Bulk quote request](#)

Species Reactivity	Human
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rBP53-12
Purity	Protein G affinity chromatography
Gene ID	7157
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This recombinant TP53 antibody is available for research use only.

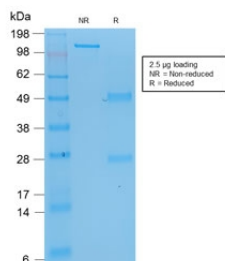
Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant TP53 antibody (clone rBP53-12). Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



IHC testing of FFPE human colon carcinoma with recombinant TP53 antibody. Required HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free recombinant TP53 antibody (clone rBP53-12) as confirmation of integrity and purity.



Western blot testing of human HeLa cell lysate with recombinant TP53 antibody (clone rBP53-12). Expected molecular weight ~53 kDa.

Description

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 5 1000 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.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the recombinant TP53 antibody to be titrated up or down for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human wild-type p53 protein was used as the immunogen for this recombinant TP53 antibody. The epitope has been mapped to within amino acids 16-25.

Storage

Store the recombinant TP53 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

References (1)