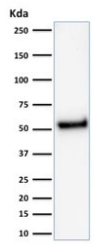
Recombinant p53 Antibody / TP53 [clone rTP53/1739] (V3939)

Catalog No.	Formulation	Size
V3939-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3939-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3939SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

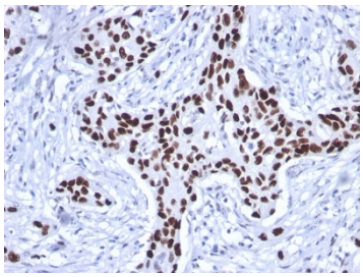
Recombinant MOUSE MONOCLONAL

Bulk quote request

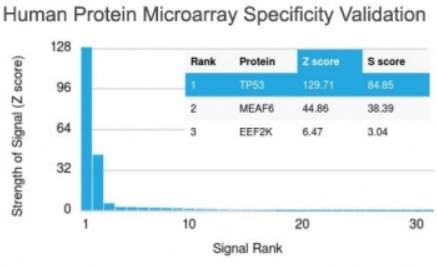
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rTP53/1739
Purity	Protein G affinity chromatography
UniProt	P04637
Localization	Nuclear
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This recombinant p53 antibody is available for research use only.



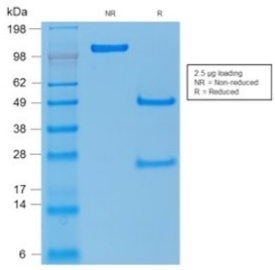
Western blot testing of human HeLa cell lysate with recombinant p53 antibody (clone rTP53/1739). Expetected molecular weight ~53 kDa.



IHC testing of FFPE human breast carcinoma stained with recombinant p53 antibody (clone rTP53/1739). Required HIER: boil tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant p53 antibody (clone rTP53/1739). These results demonstrate the foremost specificity of the rTP53/1739 mAb. 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.



SDS-PAGE analysis of purified, BSA-free recombinant p53 antibody (clone rTP53/1739) as confirmation of integrity and purity.

Description

Recombinant p53 antibody detects tumor protein p53, a transcription factor encoded by TP53 and often called the guardian of the genome. P53 coordinates DNA repair, cell cycle arrest, and apoptosis in response to cellular stress. Because TP53 mutations occur in over half of human cancers, this protein remains one of the most studied tumor suppressors in biomedical science. Elevated interest in p53 stems from its role in maintaining genomic stability and preventing malignant transformation.

Structurally, p53 contains an N terminal transactivation domain, a central DNA binding domain, and a C terminal oligomerization domain. These regions allow p53 to recognize specific DNA motifs and activate transcription of downstream genes such as p21 and BAX. Regulation of p53 is tightly controlled by MDM2 mediated ubiquitination and proteasomal degradation. Upon DNA damage, phosphorylation events stabilize p53 and promote its accumulation in the nucleus where it drives protective gene programs.

The Recombinant p53 antibody clone rTP53/1739 ensures reproducible recognition of this tumor suppressor. Recombinant technology guarantees consistent performance across lots, reducing variability that can confound long term projects. Clone rTP53/1739 has been cited in peer reviewed studies exploring TP53 mutations in human cancer and in experimental systems designed to restore tumor suppressor activity. Researchers rely on this antibody to clarify how loss of p53 function influences oncogenesis and therapy resistance.

Research using clone rTP53/1739 has shown that loss of DNA binding capacity in mutant p53 disrupts transcriptional programs while conferring gain of function properties that drive tumor progression. Detection of p53 protein with this clone aids in stratifying tumors, understanding mutational patterns, and evaluating responses to emerging drugs that reactivate mutant p53. Beyond oncology, p53 also informs studies in stem cell biology, aging, and stress signaling, where its ability to maintain cellular homeostasis continues to be investigated.

NSJ Bioreagents supplies this Recombinant p53 antibody to support studies in tumor biology, transcriptional regulation, and therapeutic discovery. Alternate names include TP53 antibody, cellular tumor antigen p53 antibody, tumor suppressor protein p53 antibody, guardian of the genome antibody, and transformation related protein 53 antibody.

Application Notes

Optimal dilution of the recombinant p53 antibody should be determined by the researcher.

Immunogen

Recombinant full length human protein was used as the immunogen for the recombinant p53 antibody.

Storage

Store the recombinant p53 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com