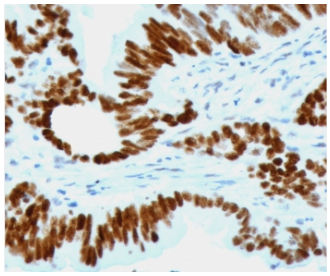
Recombinant p53 Antibody / Rabbit Monoclonal [clone CTA53-2R] (V3750)

Catalog No.	Formulation	Size
V3750-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3750-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3750SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3750IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

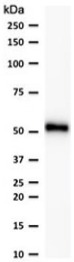
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CTA53-2R
Purity	Protein A affinity chromatography
UniProt	P04637
Localization	Predominantly nuclear
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This recombinant p53 antibody is available for research use only.



IHC staining of FFPE human colon carcinoma with recombinant p53 antibody (clone CTA53-2R). Required HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of human HeLa cell lysate with recombinant p53 antibody (clone CTA53-2R).

Description

Recombinant p53 antibody provides a dependable method for detecting tumor protein p53, a transcription factor encoded by the TP53 gene. Often referred to as the guardian of the genome, p53 preserves genomic stability by regulating DNA repair, cell cycle arrest, senescence, and apoptosis. Because mutations in TP53 occur in more than half of human cancers, p53 remains one of the most studied tumor suppressors in biology and medicine.

In normal physiology, p53 protein levels are tightly controlled by MDM2 mediated ubiquitination and degradation. Upon DNA damage, oncogenic stress, or hypoxia, p53 becomes stabilized and accumulates in the nucleus, where it activates or represses numerous target genes. This broad regulatory network prevents malignant transformation by halting proliferation or inducing cell death when genomic integrity is compromised.

The Recombinant p53 antibody clone CTA53-2R provides accurate and reproducible recognition. Recombinant technology ensures lot-to-lot consistency, enabling dependable comparisons across studies. Clone CTA53-2R has been employed in oncology to examine tumor suppressor function, in cell biology to study stress responses, and in developmental research to investigate checkpoint regulation. Multiple peer-reviewed publications have cited the use of this clone in cancer research, further validating its reliability in experimental contexts.

Research with clone CTA53-2R has clarified how loss of p53 activity contributes to uncontrolled proliferation, genomic instability, and therapy resistance. It also supports translational research into therapeutic approaches designed to restore p53 function in tumors. Beyond oncology, p53 detection informs studies of aging, stress adaptation, and stem cell regulation. This antibody continues to aid basic and applied investigations into one of the most important proteins in biomedical research.

NSJ Bioreagents supplies this Recombinant p53 antibody to support studies in cancer biology, transcriptional regulation, and stress signaling. The protein is also described as TP53 antibody, tumor suppressor p53 antibody, cellular tumor antigen p53 antibody, and guardian of the genome antibody.

Application Notes

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

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 protein was used as the immunogen for this recombinant p53 antibody.

Storage

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