

# **Product datasheet for AP06550PU-S**

# p53 (TP53) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Immunofluorescence: 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 351-400 of Human p53.

**Specificity:** This antibody detects endogenous levels of p53 protein.

(region surrounding Lys386)

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Preservative: 0.05% Sodium Azide

Concentration: 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen

**Conjugation:** Unconjugated

**Storage:** Store at 2-8°C one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 53, 43 kDa

**Gene Name:** tumor protein p53

Database Link: Entrez Gene 7157 Human

P04637



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### Background:

p53 is a DNA-binding, oligomerization domain and transcription activation domain-containing tumor suppressor that upregulates growth arrest and apoptosis-related genes in response to stress signals, thereby influencing programmed cell death, cell differentiation and cell cycle control mechanisms. p53 localizes to the nucleus yet can be chaperoned to the cytoplasm by the negative regulator MDM2, an E3 ubiquitin ligase that is upregulated in the presence of active p53, where MDM2 polyubiquitinates p53 for proteasome targeting. p53 can assemble into tetramers in the absence of DNA, fluctuates between latent and active (DNA-binding) conformations, and is differentially activated through posttranslational modifications including phosphorylation and acetylation. Mutations in the DNA-binding domain (DBD) (amino acids 110-286) of p53 can compromise energetically favorable association with cis elements and are implicated in several human cancers.

Synonyms:

Cellular tumor antigen p53, Tumor suppressor p53, Phosphoprotein p53, NY-CO-13

## **Product images:**

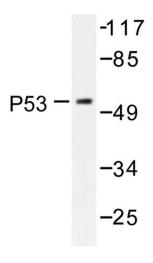
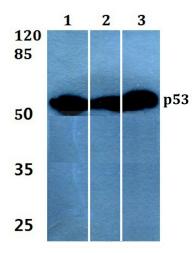
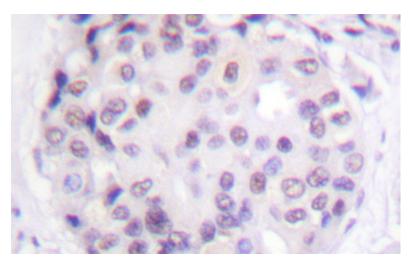


Figure 1. Western blot (WB) analysis of p53 antibody in extracts from 293 cells treated with Etoposide 25uM 60'.





Western blot (WB) analysis of p53 antibody at 1/500 dilution Lane 1:MCF-7 whole cell lysate Lane 2:NIH-3T3 whole cell lysate Lane 3:H9C2 whole cell lysate



Immunohistochemistry (IHC) analyzes of p53 antibody in paraffin-embedded human breast carcinoma tissue.