

## Anti-p53 Antibody (9D896)

### Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	9D896
Purification:	Affinity-chromatography

### Applications

Verified Activity:	1. Western Blot -Positive WB detected in: COLO320 whole cell lysate, 293 whole cell lysate -All lanes: TP53 antibody at 1:2000 -Secondary: Goat polyclonal to rabbit IgG at 1/50000 dilution -Predicted band size: 44, 38, 39, 40, 34, 35, 30, 24, 25 kDa -Observed band size: 53 kDa
	2. IHC image of TMAH-01200 diluted at 1:100 and staining in paraffin-embedded human glioma cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.
	3. Immunofluorescence staining of HepG2 Cells with TMAH-01200 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).
Application:	ELISA, WB, IHC, IF
Recommended	WB:1:500-1:5000; IHC:1:50-1:200; IF:1:20-1:200.

### Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

### Antigen Details

Immunogen:	A synthetic peptide: Human p53
Antigen Species:	Human
Gene ID:	7157
Uniprot ID:	P04637
Biology Area:	Epigenetics and Nuclear Signaling, Cancer, Cell biology

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### Research Background

Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes required for this process. One of the activated genes is an inhibitor of cyclin-dependent kinases. Apoptosis induction seems to be mediated either by stimulation of BAX and FAS antigen expression, or by repression of Bcl-2 expression. Its pro-apoptotic activity is activated via its interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2. However, this activity is inhibited when the interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 is displaced by PPP1R13L/iASPP. In cooperation with mitochondrial PPIF is involved in activating oxidative stress-induced necrosis; the function is largely independent of transcription. Induces the transcription of long intergenic non-coding RNA p21 (lincRNA-p21) and lincRNA-Mkln1. LincRNA-p21 participates in TP53-dependent transcriptional repression leading to apoptosis and seems to have an effect on cell-cycle regulation. Implicated in Notch signaling cross-over. Prevents CDK7 kinase activity when associated to CAK complex in response to DNA damage, thus stopping cell cycle progression. Isoform 2 enhances the transactivation activity of isoform 1 from some but not all TP53-inducible promoters. Isoform 4 suppresses transactivation activity and impairs growth suppression mediated by isoform 1. Isoform 7 inhibits isoform 1-mediated apoptosis. Regulates the circadian clock by repressing CLOCK-ARNTL/BMAL1-mediated transcriptional activation of PER2.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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