

Catalog No. LF-PA0050

POLYCLONAL ANTIBODY



## Anti-p53

**Background :** p53 is a transcription factor that regulates the cell cycle and hence functions as a tumor suppressor. p53 has been described as "the guardian of the genome", referring to its role in conserving stability by preventing genome mutation. p53 has many anti-cancer mechanisms: activating DNA repair proteins when DNA has sustained damage, holding the cell cycle at the G1/S regulation point on DNA damage recognition, initiating apoptosis if the DNA damage proves to be irreparable. Human p53 is 393 amino acids long and has three domains: 1) N-terminal transcription-activation domain (TAD), which activates transcription factors. 2) central DNA-binding core domain (DBD) 3) C-terminal homo-oligomerisation domain (OD); tetramerization greatly increases the activity of p53 in vivo. Mutations that deactivate p53 in cancer usually occur in the DBD and most of these mutations destroy the ability of the protein to bind to its target DNA sequences.

**Immunogen :** Synthetic peptide

**Host :** Rabbit

**Type :** Purified

**Isotype :** IgG

**Size :** 100µl

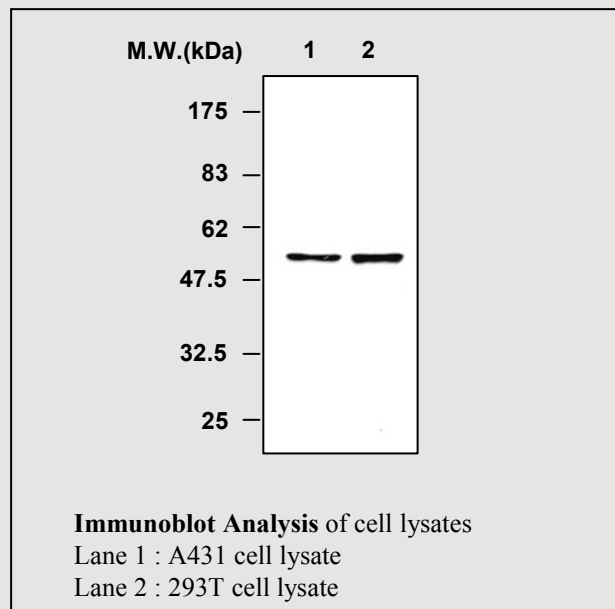
**Compositon :** PBS containing 50% glycerol

**Positive control :** A431 cell lysate

**Storage :** Store for 1 year at -20°C from date of shipment

### Species cross reactivity

Human	Mouse	Rat
+	+	+



### Applications :

Western blotting (1:2,000)

Immunoprecipitation was not tested

### Background Reference :

- 1) Strachan T, Read AP. (1999). Human Molecular Genetics 2. Ch.18, Cancer Genetics
- 2) McCormick F (2001) Nat Rev Cancer. vol.1(2): pp.130-41
- 3) Vogelstein B. et al, (2000) Nature. vol.408(6810): pp.307-10
- 4) Blagosklonny MV. (2002) Int J Cancer. vol. 98(2): pp.161-6

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