

## Anti-p53 Phospho-Ser20 antibody, monoclonal (17B6)

71-113      50  $\mu$ g

*p53* mutants are found in more than half of human cancers and are considered as the most important human cancer related gene. *p53* is detected at 53kD position by electrophoresis and is composed of 393 amino acids. In the unstressed normal cells the *p53* level is low and it is inactive. However, with stress, especially with DNA damage, it is activated to promote arrest of cell cycle and repair of DNA damage, or induction of apoptosis. The functions of *p53* are regulated by the phosphorylation of serine and threonine, and the acetylation of lysine at various sites in the molecule (1).

*p53* at Ser20 is phosphorylated by Chk1 and Chk2 kinases and this enhances tetramerization, stability and activity of *p53*. (2, 3)

### Application

- 1) Western blotting ( $\sim 1 \mu$ g/ml)
- 2) ELISA

### Specification

Antigen: synthetic peptide containing phospho-Ser20

Isotype: mouse IgG1 ( $\kappa$ )

Form: Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol. Sterile-filtered.

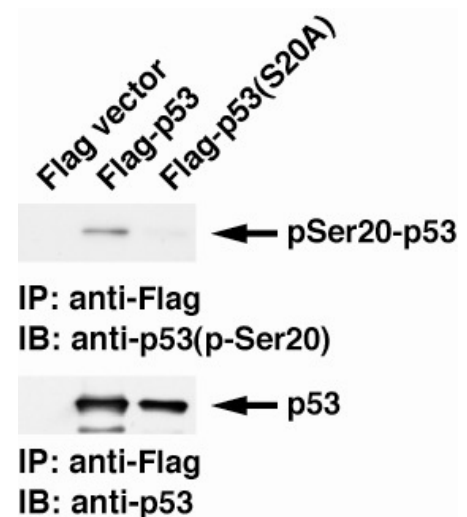
Reaction: Human *p53* phosphorylated at Ser20.

Storage:  $-20^{\circ}\text{C}$  (long period,  $-70^{\circ}\text{C}$ )

### References:

1. Bode AM & Dong Z. Nature Rev. Cancer 4: 793 (2004)
2. Shieh SY et al. EMBO J. 18: 1815 (1999)
3. Hirao A. Science 287: 1824 (2000)

**Fig.1 Identification of *p53* phospho-Ser20 with monoclonal antibody 17B6 by Western blotting.** The lysates of H1299 cells (*p53* non-producing) transfected either with Flag vector (left lane), Flag-*p53* (wild-type) expressing plasmid (middle lane) or Flag-*p53* mutant (Ser20Ala) expressing plasmid (right lane) were immunoprecipitated with anti-Flag antibody and then analyzed by western blotting with anti-*p53* p-S20 monoclonal antibody, 17B6, (upper panel) or with pan-tropic *p53* antibody (lower panel).



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