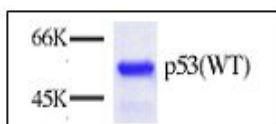


p53

Tumor Suppressor Protein and Transcription Factor, wild type human, recombinant, Sf 9 insect cells

Cat. No.	Amount
PR-759	5 µg



For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

Activity

1 ng is sufficient for a gel mobility shift assay in a 20 µl reaction, 50 ng are sufficient for reconstituted transcription assay and 100 ng are sufficient for a protein-protein interaction assay.

Application

Recombinant p53 can be used for

- 1) gel mobility shift assay or for DNase I footprinting in the presence of double stranded DNA containing a consensus p53-binding sequence [5'-PuPuPuC(A/T)(T/A)GPyPyPy-3'],
- 2) *in vitro* transcription assay,
- 3) protein-protein interaction assay,
- 4) cell growth assay.

Molecular Weight

55 kDa

Purity

>95% by SDS-PAGE

Description

p53 wild type is His-tagged at the N-terminus. The protein was identified as a tumor suppressor by showing to block the transformation and to inhibit tumor cell growth. In addition, p53 is a transcription factor capable of regulating the expression of a subset of downstream genes. Different mutations in p53 gene have been characterized in a variety of human cancers. Loss or mutation of p53 function is highly correlated with tumorigenesis.

Selected References:

- Finlay *et al.* (1989) The p53 proto-oncogene can act as a suppressor of transformation. *Cell* **57**:1083.
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Baker *et al.* (1990) Suppression of human colorectal carcinoma cell growth by wild-type p53. *Science* **249**:912.
Fields *et al.* (1990) Presence of a potent transcription activating sequence in the p53 protein. *Science* **249**:1046.
Raycroft *et al.* (1990) Transcriptional activation by wild-type but not transforming mutants of the p53 anti-oncogene. *Science* **249**:1049.
Hollstein *et al.* (1991) p53 mutations in human cancers. *Science* **253**:49.
Bennett *et al.* (1992) Mutational spectra and immunohistochemical analyses of p53 in human cancers. *Chest* **101**:19S.
Mao *et al.* (2004) *Fbxw/Cdc4* is a p53-dependent, haploinsufficient tumour suppressor gene. *Nature* **432**:775.
Lin *et al.* (2005) p53 induces differentiation of mouse embryonic stem cells by suppressing Nanog expression. *Nature Cell Biology*. **7**:165.