

# Anti-p53

Mouse Monoclonal Antibody

# Catalog # P05-60M

Lot # B3216-67

## **Cited Applications**

ELISA, ChIP, IHC, IP, WB

Ideal working dilutions for each application should be empirically determined by the investigator.

## Specificity

Recognizes the p53 protein in human tissues and cell lines

### **Cross Reactivity**

Human

# Host/Isotype/Clone#

Mouse, IgG2a

## **Immunogen**

The antibody was produced against recombinant human p53 peptide

#### **Formulation**

 $0.02\,M$  Potassium Phosphate,  $0.15\,M$  Sodium Chloride, pH 7.2 + 0.01% (w/v) Sodium Azide

## **Stability**

1yr at -20°C from date of shipment

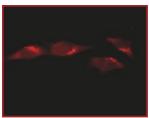
## Scientific Background

p53 is a key regulator of cell growth and acts as a tumor suppressor gene. Wild-type p53 gene can suppress transformation of rat embryo fibroblasts in cell culture by other oncogenes such as the adenovirus E1A and Ras (1). DNA tumor viruses such as SV40 large T antigen and the adenovirus E1A plus E1B-55Kd proteins bind to p53 and inactivate its tumor suppressor activities leading to cellular transformation. Mutational inactivation of the p53 gene is detected in more than 50% of human cancers. Mutation of p53 renders cancer cells more resistant to current cancer therapies due to lack of p53-mediated apoptosis (2).

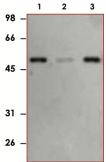
### **References:**

- Levine, A J. et al.: Tumor suppressor genes: the p53 and retinoblastoma sensitivity genes and gene products. Biochim Biophys Acta. 1990: 1032(1); 119-36.
- 2. Sun, Y.: p53 and its downstream proteins as molecular targets of cancer. Mol Carcinog. 2006: 45(6); 409-15.

# **Sample Data**



Immunofluorescence microscopy of HeLa cells using Anti-p53 (1:100 dilution).



Western blotting using Anti-p53 (1:1,500). HeLa whole cell lysate (lane 1), cytosol fraction (lane 2) and nuclear extract (lane 3) (15 µg)

# Anti-p53

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Catalog #
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Purification
Stability
Storage & Shipping

P05-60M B3216-67 Protein A chromatography

1 yr at -20°C from date of shipment Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.