

#### p53 Antibody

p53 Antibody, Clone Pab 1801 Catalog # ASM10126

## Specification

# p53 Antibody - Product Information

Application Primary Accession Other Accession Host Isotype Reactivity Clonality Format **Description** Mouse Anti-Human p53 Monoclonal IgG1

P04637 NP\_000537.3 Mouse IgG1 Human Monoclonal RPE

IHC, WB

**Target/Specificity** Detects ~53kDa.

#### **Other Names**

P53 Antibody, LFS1 Antibody, TRP53 Antibody, FLJ92943 Antibody, TP53 Antibody, p53 Tumor Suppressor Antibody, Phosphoprotein p53 Antibody, TP53 Antibody, Transformation related protein 53 Antibody, TRP53 Antibody, Tumor protein p53 Antibody

Immunogen Fusion protein (Human), amino acids 46-53

**Purification** Protein G Purified

Storage Storage Buffer PBS pH7.4, 50% glycerol, 0.09% sodium azide

-20°C

Shipping Temperature Certificate of Analysis Blue Ice or 4ºC

1  $\mu$ g/ml of SMC-183 was sufficient for detection of p53 in 10  $\mu$ g of HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization Cytoplasm | Nucleus | PML body | Endoplasmic Reticulum

# p53 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

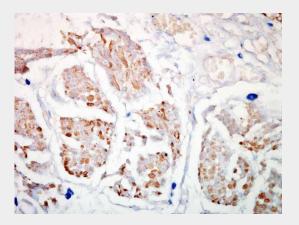
<u>Western Blot</u>

Blocking Peptides



- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## p53 Antibody - Images



Immunohistochemistry analysis using Mouse Anti-p53 Monoclonal Antibody, Clone Pab1801 (ASM10126). Tissue: esophagus cancer cells. Species: Human. Primary Antibody: Mouse Anti-p53 Monoclonal Antibody (ASM10126) at 1:50000. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown). Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain.

106→	
79.68→	
48.33→	-
37.81→	
-	
23.27→	-
18.19→	

Western Blot analysis of Human HeLa cell lysates showing detection of p53 protein using Mouse Anti-p53 Monoclonal Antibody, Clone Pab1801 (ASM10126). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-p53 Monoclonal Antibody (ASM10126) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

# p53 Antibody - Background

The p53 protein (tumor protein 53 or TP53) is a DNA-binding cell cycle-regulating transcription factor that governs cell division and the fine balance between cell death and cell survival (1). P53 plays a critical role in tumor suppression and hence it is often described as "the guardian of the genome", "the guardian angel gene", or the "master watchman." This also refers to its role in



conserving stability by preventing genome mutation (2). Defects in p53 are linked to >50% of human cancers, and restoring p53 function to these cancer cells can induce growth arrest and apoptosis (3). When p53 has been damaged, it can also lead to autoimmune disorders (4, 5).

#### p53 Antibody - References

1. Georescu C.V., Saftoiu A., Georgescu C.C., Ciurea R. and Ciurea T. (2007) J Gastrointestin Liver Dis. 16(2): 133-9.

- 2. Strachan T., et al. (1999) Human Molecular Genetics 2. Ch. 18: Cancer Genetics.
- 3. Hansen J.E., et al. (2007) Cancer Research 67: 1769-1774.
- 4. Di Cesare E., et al. (2001) Ann Clin Lab Sci 31: 253-8.
- 5. Akere A., Otegbayo J.A. (2007) Singapore Med J. 48(1): 41-4.