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p53 Antibody
Catalog # ASM10542

Specification

p53 Antibody - Product Information

Application	**ICC/IF, WB**
Primary Accession	P04637
Other Accession	NP_000537.3
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**

Description
Rabbit Anti-Human p53 Polyclona

Target/Specificity
Predicted molecular weight at ~43.7kDa. Observed bands at ~53kDa.

Other Names
TP53 Antibody, Tumor Protein 53 Antibody, BCC7 Antibody, LFS1 Antibody, TRP53 Antibody, p53 tumor suppressor Antibody

Immunogen
Synthetic peptide from the C-terminal of human tumor protein p53.

Purification
Peptide Affinity Purified

Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
A 1:1000 dilution of SPC-682 was sufficient for detection of p53 on HeLa cell lysates using Goat anti-rabbit IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasm | Nucleus | PML body | Endoplasmic Reticulum | Mitochondrion matrix

p53 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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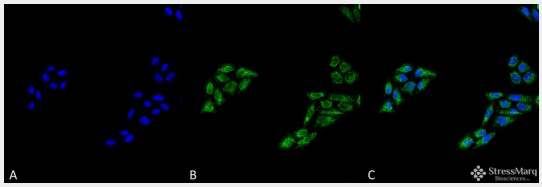
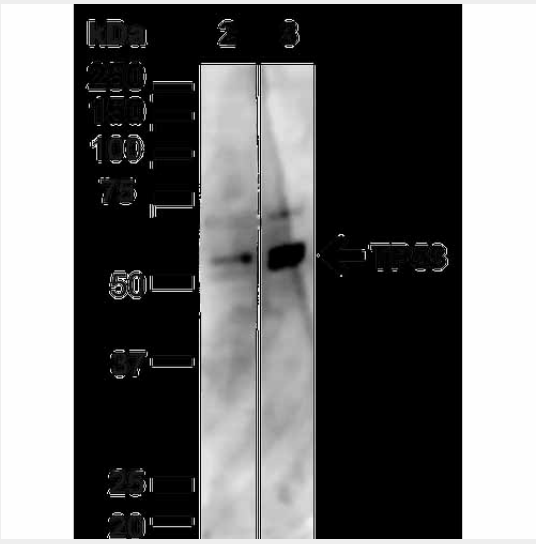
- Flow Cytomety
- Cell Culture

p53 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-p53 Polyclonal Antibody (ASM10542). Tissue: Cervical Cancer cell line (HeLa). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-p53 Polyclonal Antibody (ASM10542) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit ATTO 488 at 1:100 for 60 min at RT. Counterstain: DAPI (blue) nuclear stain at 1:5000 for 5 min RT. Localization: Cytoplasm, PML body, Endoplasmic Reticulum. Magnification: 40X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) p53 Antibody (D) Composite.



Western blot analysis of Human HeLa and 293T cell lysates showing detection of ~43.7kDa p53 protein using Rabbit Anti-p53 Polyclonal Antibody (ASM10542). Lane 1: MW Ladder. Lane 2: Human HeLa (20 µg). Lane 3: Human 293T (20 µg). Load: 20 µg. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rabbit Anti-p53 Polyclonal Antibody (ASM10542) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit: HRP at 1:2000 for 1 hour at RT. Color Development: TMB solution for 12 min at RT. Predicted/Observed Size: ~43.7kDa.

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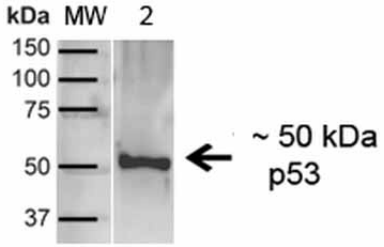

Western blot analysis of Human A431 showing detection of ~43.7kDa p53 protein using Rabbit Anti-p53 Polyclonal Antibody (ASM10542). Lane 1: MW Ladder. Lane 2: Human A431 (20 µg). Load: 20 µg. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rabbit Anti-p53 Polyclonal Antibody (ASM10542) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit: HRP at 1:2000 for 1 hour at RT. Color Development: TMB solution for 12 min at RT. Predicted/Observed Size: ~43.7kDa.

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.