

Datasheet for ABIN3201006
anti-p53 antibody (pSer315)



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Overview

Quantity:	100 µg
Target:	p53 (TP53)
Binding Specificity:	pSer315
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Synthetic peptide containing pSer315 of p53
Clone:	18
Isotype:	IgG2b kappa
Characteristics:	This product is the purified IgG fraction obtained from serum-free culture medium of mouse hybridoma (clone #18) which produces monoclonal antibody that specifically recognizes human p53 protein with phospholyrated Ser315.
Purification:	Purified

Target Details

Target:	p53 (TP53)
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Target Details

Alternative Name: [p53 \(TP53 Products\)](#)

Background: 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 and stability of p53 are regulated by phosphorylation of serine and threonine, and acetylation of lysine at various sites in the molecule. Ser315 is phosphorylated by aurora kinase and cycline-dependent kinases when cells are subjected to stress such as DNA damage and microtubule disruption by nocodazole. However the effect of the phosphorylation on the function of p53 is mostly unknown.

UniProt: [P04637](#)

Pathways: [p53 Signaling](#), [MAPK Signaling](#), [PI3K-Akt Signaling](#), [Apoptosis](#), [AMPK Signaling](#), [Chromatin Binding](#), [ER-Nucleus Signaling](#), [Positive Regulation of Endopeptidase Activity](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Autophagy](#), [Warburg Effect](#)

Application Details

Application Notes: 1. Western blotting: 1,000~2000 dilution

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: PBS (pH 7.4), 50 % glycerol

Preservative: Azide free

Storage: -20 °C

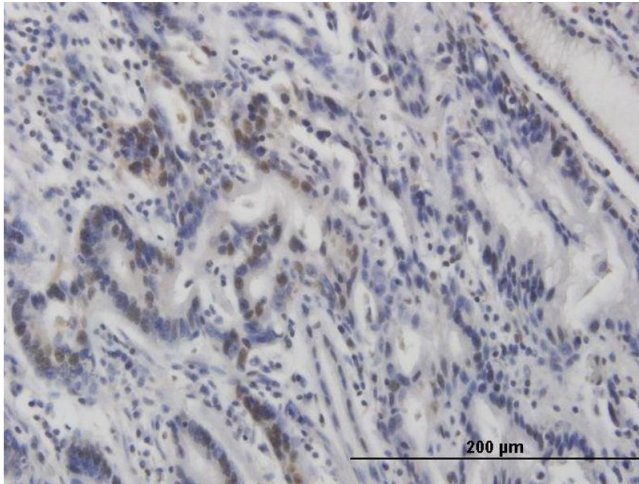
Storage Comment: Upon arrival centrifuge briefly and store at -20 C.

Publications

Product cited in: Bode, Dong. "Post-translational modification of p53 in tumorigenesis." in: **Nature reviews. Cancer**, Vol. 4, Issue 10, pp. 793-805, (2004) ([PubMed](#)).

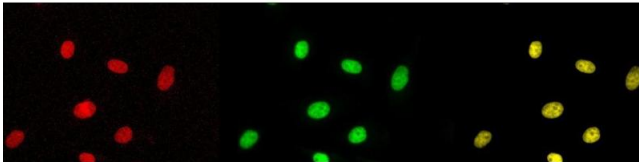
Katayama, Sasai, Kawai, Yuan, Bondaruk, Suzuki, Fujii, Arlinghaus, Czerniak, Sen: " Phosphorylation by aurora kinase A induces Mdm2-mediated destabilization and inhibition of p53." in: **Nature genetics**, Vol. 36, Issue 1, pp. 55-62, (2003) ([PubMed](#)).

Images



Immunohistochemistry

Image 1.



Immunofluorescence

Image 2.

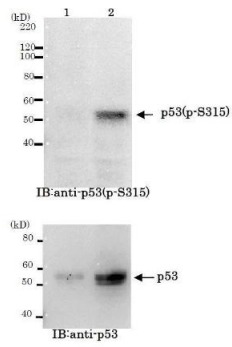


Fig.1 Identification of Ser315-phosphorylated p53 protein by Western blotting.
 Sample: Crude cell extracts of MCF7 untreated (lane 1) and treated with nocodazole at 100 ng/ml for 48 h (lane2).
 The lower panel is the whole p53 protein identified by omnipotent anti-p53 antibody (DO-1).

Western Blotting

Image 3.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN3201006.