

# p53AIP1 Antibody

Catalog # ASC10140

## Product Information

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<b>Application</b>	WB, IF, ICC, E
<b>Primary Accession</b>	<a href="#">Q9HCN2</a>
<b>Other Accession</b>	<a href="#">BAB16421</a> , <a href="#">10798768</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	12935
<b>Conjugate</b>	Unconjugated
<b>Application Notes</b>	p53AIP1 antibody can be used for detection of p53AIP1 by Western blot at 4 - 8 $\mu$ g/mL. Antibody can also be used for immunocytochemistry starting at 10 $\mu$ g/mL. For immunofluorescence start at 20 $\mu$ g/mL.

## Additional Information

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<b>Gene ID</b>	63970
<b>Other Names</b>	p53AIP1 Antibody: P53AIP1, p53-regulated apoptosis-inducing protein 1, p53AIP1, tumor protein p53 regulated apoptosis inducing protein 1
<b>Target/Specificity</b>	TP53AIP1;
<b>Reconstitution &amp; Storage</b>	p53AIP1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>Precautions</b>	p53AIP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	TP53AIP1
<b>Function</b>	May play an important role in mediating p53/TP53-dependent apoptosis.
<b>Cellular Location</b>	Mitochondrion.
<b>Tissue Location</b>	Only found to be expressed in thymus.

## Background

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**p53AIP1 Antibody:** The p53 tumor-suppressor protein can induce apoptosis through transcriptional activation of several genes. One such protein p53AIP was initially identified through direct cloning of p53 binding sequences from human genomic DNA. Its expression is inducible by p53 following p53 phosphorylation on Ser-46, and ectopic expression of p53AIP leads to apoptotic cell death. Both the phosphorylation of p53 and the induction of p53AIP were blocked by inhibiting the expression of p53DINP1 by the introduction of antisense oligonucleotides to p53DINP1, suggesting that the apoptosis associated with p53AIP expression is regulated by p53DINP1. Finally, as adenovirus-mediated introduction of p53AIP has been shown to suppress tumor growth in vivo, it has been suggested that p53AIP gene transfer may become a useful strategy for the treatment of p53-resistant cancers. Three isoforms of p53AIP are known to exist; this antibody will detect all three.

## References

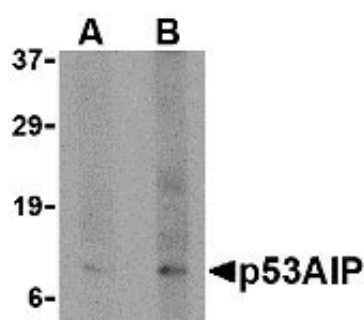
Kern SE, Pietenpol JA, Thiagalingam S, Seymour A, et al. Oncogenic forms of p53 inhibit p53-regulated gene expression. *Science* 1991; 252:1708-11.

Oda K, Arakawa H, Tanaka T, et al. p53AIP1, a potential mediator of p53-dependent apoptosis, and its regulation by Ser-46-phosphorylated p53. *Cell* 2000; 102:849-52.

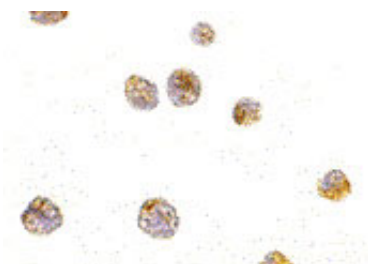
Okamura S, Arakawa H, Tanaka T, et al. p53DINP1, a p53-inducible gene, regulates p53-dependent apoptosis. *Mol. Cell* 2001; 8:85-94.

Yoshida K, Monden M, Nakamura Y, et al. Adenovirus-mediated p53AIP1 gene transfer as a new strategy for treatment of p53-resistant tumors. *Cancer Sci.* 2004; 95:91-7.

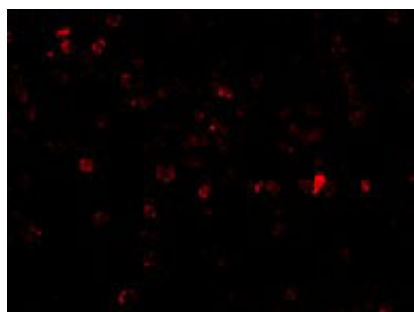
## Images



Western blot analysis of p53AIP1 in HL60 cell lysate with p53AIP1 antibody at (A) 4 and (B) 8  $\mu\text{g/mL}$ .



Immunocytochemistry of p53AIP1 in HL60 cells with p53AIP1 antibody at 10  $\mu\text{g/mL}$ .



Immunofluorescence of p53AIP1 in HL60 cells with p53AIP1 antibody at 20  $\mu\text{g/mL}$ .