



## Product Information

### Anti-p53DINP1/SIP

Developed in Rabbit  
Affinity Isolated Antibody

Product Number **P 4868**

#### Product Description

Anti-p53DINP1/SIP is developed in rabbit using a synthetic peptide (MFQRLNKMFVGEVS) corresponding to amino acids 1-14 of human p53DINP1<sup>1</sup> as immunogen. The sequence is identical between the  $\alpha$  and  $\beta$  forms and differs by one amino acid from that of mouse. The antibody is purified by immunoaffinity chromatography.

Anti-p53DINP1/SIP recognizes p53DINP1/SIP by immunoblotting (27 kDa). It reacts with p53DINP1/SIP from human, mouse, and rat.

Several molecules involved in the p53 tumor-suppressor network have been identified. p53DINP1 (p53-dependent damage-inducible nuclear protein 1) and SIP (stress induced protein) have been identified in human and mouse.<sup>1,2</sup> The *p53DINP1/SIP* gene encodes two proteins of 27 and 18 kDa in human and mouse termed p53DINP1- $\alpha$  and p53DINP1- $\beta$  or SIP<sup>27</sup> and SIP<sup>18</sup>.<sup>1,2</sup> The p53DINP1 antisense oligonucleotide inhibits and overexpression of p53DINP1/SIP enhances Ser<sup>46</sup> phosphorylation of p53, induction of p53AIP1, and cell death induced by DNA double-strand breaks.<sup>1</sup> p53DINP1 may regulate p53-dependent apoptosis through phosphorylation at Ser<sup>46</sup> and induction of p53AIP1. p53DINP1/SIP is expressed in many tissues and induced by a variety of stress agents including UV stress, mutagenic stress, heat shock, and oxidative stress.<sup>2</sup>

#### Reagent

Anti-p53DINP1/SIP is supplied as approximately 1.0 mg/ml of antibody in phosphate buffered saline containing 0.02% sodium azide

#### Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) has been sent to the attention of the safety officer at your institution. Consult the MSDS for information regarding hazards and safe handling practices.

#### Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Do not store in a "frost-free" freezer. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

For immunoblotting, the recommended working antibody concentration is 1-2  $\mu$ g/ml using human lung tissue lysate. A lower band at 18 kDa was detected in human spleen, mouse liver, and mouse kidney tissue lysates, which may represent the p53DINP1- $\beta$  form.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working concentrations by titration.

#### References

1. Okamura, S., et al., p53DINP1, a p53-inducible gene, regulates p53-dependent apoptosis. *Mol. Cell.*, **8**, 85-94 (2001).
2. Tomasini, R., et al., Molecular and functional characterization of the stress-induced protein (SIP) gene and its two transcripts generated by alternative splicing. SIP induced by stress and promotes cell death. *J. Biol. Chem.*, **276**, 44185-44192 (2001).

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