

# Product Information

## p33ING1, His-tagged, human recombinant, expressed in *Sf9* insect cells

Catalog Number **SRP5111**

Storage Temperature –70 °C

Synonyms: ING1, p33, p47, p24ING1c, p33ING1b, p47ING1a

### Product Description

p33ING1 displays characteristics of a tumor suppressor protein, and can induce cell growth arrest and apoptosis. p33ING1 is a nuclear protein and acute expression of p33ING1 inhibits cell growth. p33ING1 physically interacts with the tumor suppressor protein TP53 and is a component of the p53 signaling pathway. Mutation of the p33ING1 gene occurs in neuroblastoma cells and reduced expression is observed in some breast cancer cell lines.<sup>1</sup> It has been proposed that p33ING1 can act as a potent growth regulator in normal and in established cells, and plays a role as a candidate tumor suppressor gene whose inactivation may contribute to the development of cancers.<sup>2</sup>

Recombinant, full-length, human p33ING1 was expressed by baculovirus in *Sf9* insect cells using an N-terminal His tag. The gene accession number is NM\_198219. Recombinant protein stored in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.2 mM DTT, and 25% glycerol.

Molecular mass: ~38 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

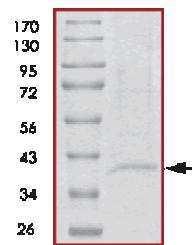
### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

**Figure 1.**  
SDS-PAGE Gel of Typical Lot  
70–95% (densitometry)



### References

1. Garkavtsev, I. et al., Suppression of the novel growth inhibitor p33ING1 promotes neoplastic transformation. *Nat. Genet.*, **23**, 373 (1999).
2. Goeman, F. et al., Growth Inhibition by the Tumor Suppressor p33ING1 in Immortalized and Primary Cells: Involvement of Two Silencing Domains and Effect of Ras. *Mol. Cell Biol.*, **25**, 422-431 (2005).

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