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Product Information

p21CIP1, GST-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5108** Storage Temperature –70 °C

Synonyms: CDKN1A, P21, SDI1, WAF1, CAP20, CDKN1, MDA-6

Product Description

CIP1 (Cyclin-Dependent Kinase Inhibitor 1A) regulates cell cycle progression, terminal differentiation, and apoptosis. CIP1 was shown to be induced by p53 and to be a potent inhibitor of cyclin-dependent kinase (CDK) activity. DNA damage leads to increased expression of CIP1 in cyclin E-containing complexes and to an associated decrease in cyclin-dependent kinase activity. CIP1 is a critical downstream effector in the p53-specific pathway of growth control in mammalian cells.²

Recombinant, full-length, human p21CIP1 was expressed in *E. coli* cells using an N-terminal GST tag. The gene accession number is NM_000389. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~46 kDa

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

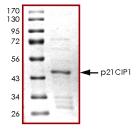
Precautions and Disclaimer

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

- el-Deiry, W.S. et al., WAF1/CIP1 is induced in p53-mediated G₁ arrest and apoptosis. Cancer Res., 54,1169-1174 (1994).
- Wagner, M. et al., Cyclin-dependent kinaseinhibitor 1 (CDKN1A) in the squamous epithelium of the oropharynx: possible implications of molecular biology and compartmentation. Anticancer Res., 21, 333-345, (2001).

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