

3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

CDKN3, GST-tagged, human recombinant, expressed in Sf9 insect cells

Catalog Number **SRP5175** Storage Temperature –70 °C

Synonyms: CDI1, CIP2, FLJ25787, KAP, KAP1, MGC70625

Product Description

CDKN3 is a member of the dual specificity protein phosphatase family that acts as a cyclin-dependent kinase inhibitor. CDKN3 has been shown to interact with and dephosphorylate specifically the CDK2 kinase, thereby, preventing activation. CDKN3 has been reported to be deleted, mutated, or overexpressed in several kinds of cancers. Increased expression of CDKN3 leads to increased levels of kinase-associated phosphatase activity that inhibits the G₁/S transition of the cell cycle by dephosphorylating the cyclin-dependent kinases. ²

Recombinant full-length human CDKN3 was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST tag. The gene accession number is NM_005192. 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: ~51 kDa

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

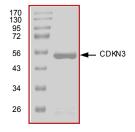
Precautions and Disclaimer

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

- Niculescu, M.D. et al., Choline availability modulates human neuroblastoma cell proliferation and alters the methylation of the promoter region of the cyclin-dependent kinase inhibitor 3 gene. J. Neurochem., 89(5), 1252-9 (2004).
- 2. Yeh, C.T. et at., Abolishment of the interaction between cyclin-dependent kinase 2 and Cdk-associated protein phosphatase by a truncated KAP mutant. Biochem. Biophys. Res. Comm., **305(2)**, 311-4 (2003).

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