# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-164aa

**UniProt No.** P38936

NCBI Accession No. NP\_000380.1

### **Alternative Names**

Cyclin-dependent kinase inhibitor 1A, P21, CIP1, SDI1, WAF1, CAP20, CDKN1, MDA-6, p21CIP1

# **PRODUCT SPECIFICATION**

Molecular Weight 20.2 kDa (184aa)

**Concentration** 0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2M urea, 10% glycerol, 0.1M NaCl

#### **Purity**

> 85% by SDS-PAGE

Tag

His-Tag

Application SDS-PAGE, Denatured

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

### BACKGROUND

## Description

CDKN1A, also known as P21 or WAF1, plays a critical role in the cellular response to DNA damage, and its overexpression results in cell cycle arrest. In association with CDK2 complexes, it serves to inhibit kinase activity and block progression through G1/S. However, CDKN1A may also enhance assembly and activity in complexes of CDK4 or CDK6 and cyclin D. This protein may be the important intermediate by which p53/TP53 mediates its role as an inhibitor of cellular proliferation in response to DNA damage. Recombinant human CDKN1A protein, fused to His-tag at N-terminus, was expressed in E. coli.



### **Amino acid Sequence**

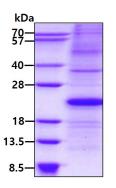
<MGSSHHHHHH SSGLVPRGSH> MSEPAGDVRQ NPCGSKACRR LFGPVDSEQL SRDCDALMAG CIQEARERWN FDFVTETPLE GDFAWERVRG LGLPKLYLPT GPRRGRDELG GGRRPGTSPA LLQGTAEEDH VDLSLSCTLV PRSGEQAEGS PGGPGDSQGR KRRQTSMTDF YHSKRRLIFS KRKP

#### **General References**

El-Deiry W S., et al. (1994) Cancer Res. 54:1169-1174. Harper J W., et al. (1993) Cell. 75:805-816.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.