

Cyclin-dependent kinase inhibitor 1(CDKN1A/P21/WAF1)

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. PRO-300
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➤ **Background:**

p21/WAF1/Cip1/Sdi1/Pic1 is a tumor suppressor protein. Expression of p21WAF1 is induced by wild type, but not mutant, p53 suppressor protein. The p21/WAF1 protein binds to cyclin/CDK complexes and inhibits their kinase activity thereby stopping cell cycle progression. Meanwhile, the p21WAF1 protein also binds to PCNA (proliferating cell nuclear antigen) and blocks DNA replication but not the DNA repair process. Evidently, inactivation of p53 disrupts the p53-dependent expression of p21WAF1. p21WAF1 is a tumor suppressor involved in the pathogenesis of a variety of malignancies.

➤ **Description :**

Recombinant P21/WAF1 shows a band at 47kDa on SDS-PAGE commassie blue stained gel.
Recombinant P21/WAF1 is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile filtered liquid.

➤ **Formulation:**

100µg/ml in 50mM Tris-Acetate, pH7.5, 1mM EDTA, 20% Glycerol without BSA and Sodium Azide.

➤ **Stability:**

Store vial at -20C° to -80C°. When stored at the recommended temperature, recombinant P21/WAF1 is stable for 12 months.

Please avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 90.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by reducing and non-reducing SDS-PAGE coomassie blue gel.

➤ **Dimers and aggregates:**

Less than 1% as determined by coomassie blue SDS-PAGE gel analysis.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of Human P21/WAF1.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.