
Recombinant Mouse CDKN1A Protein, N-GST & C-His

Catalog Number: bs-105560P

Species: Mouse

AA Seq: 2-159/159

Predicted MW: 45.83 kDa

Tags: N-GST & C-His

Activity: Not tested

Purity: >90% as determined by SDS-PAGE.

Purification: AC

Form: Lyophilized

Storage: Lyophilized from a solution in PBS pH 7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.

Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8°C for frequent use. Store at -20 to -80°C for twelve months from the date of receipt.

Background: This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Two alternatively spliced variants, which encode an identical protein, have been reported. Two families of cyclin dependent kinase inhibitors (CKIs) have been identified. The p21WAF1/Cip1 family inhibits all kinases involved in the G1/S transition. The p16INK4a family inhibits Cdk4 and Cdk6 specifically.