

## Recombinant CDKN2A protein

**Catalog No:** 81404, 89404

**Expressed In:** *E. coli*

**Quantity:** 50, 1000 µg

**Concentration:** 1 µg/µl

**Source:** Human

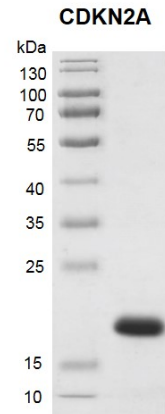
**Buffer Contents:** Recombinant CDKN2A protein is supplied in 25 mM Tris pH 8.0, 300 mM NaCl, 10% glycerol, 0.5 mM TCEP.

**Background:** CDKN2A (Cyclin-dependent kinase inhibitor 2A, is known as CDK4I, MTS-1, p16-INK4 or p16INK4A). Cyclin-dependent kinase 4 (CDK4) and CDK6 act in G1 phase as a master integrator of various mitogenic and antimitogenic signals. They phosphorylate and inactivate the cell cycle/tumor suppressor proteins of the pRb family (p105Rb, p107, and p130Rb2) and Smad3. CDK4 activity is deregulated in many human tumors and was recently found to be crucial for various oncogenic transformation processes. CDKN2A act as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein.

**Protein Details:** Recombinant CDKN2A protein was expressed in *E. coli* as the full length protein (accession number NP\_000068.1) with an N-terminal 6×His tag. The molecular weight of the protein is 17.36 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



**Recombinant CDKN2A protein**

12.5% SDS-PAGE Coomassie staining

MW: 17.36 kDa

Purity: ≥ 95%