

Recombinant CDKN2C protein

Catalog No: 81389, 81689

Expressed In: *E. coli*

Quantity: 50, 1000 µg

Concentration: 1.5 µg/µl

Source: Human

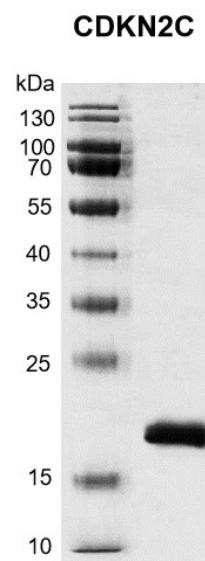
Buffer Contents: Recombinant CDKN2C protein is supplied in 25 mM Tris pH 7.4, 300 mM NaCl, 10% glycerol, 0.5 mM TCEP.

Background: CDKN2C (Cyclin-dependent kinase 4 inhibitor C, also known as Cyclin-dependent kinase 6 inhibitor, p18-INK4c or p18-INK6) is a cyclin kinase inhibitor. Cell cycle regulatory proteins play a critical role in both normal cell growth and tumorigenesis, and the cyclin dependent kinases (CDKs) are the principle regulators of cell cycle progression, and thus are important candidates for therapeutic tumour suppressors. The CDKs, which are responsible for the phosphorylation of the retinoblastoma protein (pRb) and pRb related proteins, are in turn regulated by changes in cyclin levels, phosphorylation and the presence of cyclin kinase inhibitors (CKIs). Two classes of CKIs are present within mammalian cells. One class, the p21 family, consists of p21CIP1/WAF1, p27KIP1 and p57KIP2 which are general inhibitors of the G1S CDKs. Homology between family members is limited to a conserved amino-terminal 60-residue domain responsible for kinase binding and inhibition. The second class of CKIs, the INK4 (Inhibitor of CDK4) family is a group of ankyrin repeat proteins whose members p16INK4a, p15INK4b, p18INK4c and p19INK4d are specific inhibitors of cyclin D1/CDK4 or CDK6 complexes. CDKN2C/p18INK4c as a cyclin kinase inhibitor, interacts strongly with CDK6, weakly with CDK4. Inhibits cell growth and proliferation with a correlated dependence on endogenous retinoblastoma protein RB.

Protein Details: Recombinant CDKN2C protein was expressed in *E. coli* as the full length protein (accession number NP_001253.1) with an N-terminal 6×His tag. The molecular weight of the protein is 20.06 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 guaranteed for 6 months from date of arrival.



Recombinant CDKN2C protein
12.5% SDS-PAGE Coomassie staining

M.W.: 20.06 kDa

Purity: ≥ 95%