

Full-Length

CDKN1A (Human) Recombinant Protein

Catalog # P9610

Size 2 x 10 ug

Specification

Product Description	Human CDKN1A (P38936, 1 a.a. - 164 a.a.) full recombinant protein with His tag at N-terminus expressed in <i>Escherichia coli</i> .
Sequence	MGSSHHHHHHSSGLVPRGSHMSEPAGDVRQNPCGSKACRRLFGPVDSEQLSRDCDALMAGCI QEARERWNFDVFTETPLEGDFAWERVRLGLPKLYLPTGPRRGRDELGGRRPGTSPALLQGT AEEDHVDLSLSCTLVPRSGEQAEGSPGGPGDSQGRKRRQTSMTDFYHSKRRLIFSKRKP
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	20.2
Form	Liquid
Preparation Method	<i>Escherichia coli</i> expression system
Purity	> 85.0% by SDS-PAGE
Recommend Usage	Biological Activity SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	In 20mM Tris-HCl pH 8.0 (2 M Urea, 0.1 M NaCl and 10% glycerol)
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- SDS-PAGE

Gene Info — CDKN1A

Entrez GeneID	1026
Protein Accession#	P38936
Gene Name	CDKN1A
Gene Alias	CAP20, CDKN1, CIP1, MDA-6, P21, SDI1, WAF1, p21CIP1
Gene Description	cyclin-dependent kinase inhibitor 1A (p21, Cip1)
Omim ID	116899
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq]
Other Designations	CDK-interaction protein 1 DNA synthesis inhibitor OTTHUMP00000016298 cyclin-dependent kinase inhibitor 1A melanoma differentiation associated protein 6 wild-type p53-activated fragment 1

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [Glioma](#)
- [Melanoma](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Intestinal Neoplasms](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)

- [Leiomyoma](#)
- [Leukemia](#)
- [Low Tension Glaucoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Occupational Diseases](#)
- [Ocular Hypertension](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Papillomavirus Infections](#)

- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)