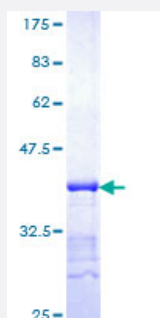


CDKN2A (Human) Recombinant Protein (Q01)

Catalog # H00001029-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human CDKN2A partial ORF (NP_000068, 57 a.a. - 156 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	ARVAELLLLHGAEPNCADPATLTRPVHDAAREGFLDTLVVLHRAGARLDVRDAWGRLPVDLAEE LGHRDVARYLRAAAGGTRGSNHARIDAAEGPSDIPD
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (76); Rat (80)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CDKN2A

Entrez GeneID	1029
GeneBank Accession#	NM_000077
Protein Accession#	NP_000068
Gene Name	CDKN2A
Gene Alias	ARF, CDK4I, CDKN2, CMM2, INK4, INK4a, MLM, MTS1, TP16, p14, p14ARF, p16, p16INK4, p16INK4a, p19
Gene Description	cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)
Omim ID	151623 155601 155755 600160 606719
Gene Ontology	Hyperlink
Gene Summary	This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, MDM1, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene. [provided by RefSeq]
Other Designations	CDK4 inhibitor p16-INK4 OTTHUMP00000021147 OTTHUMP00000021148 cell cycle negative regulator beta cyclin-dependent kinase inhibitor 2A cyclin-dependent kinase inhibitor p16 multiple tumor suppressor 1

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Glioma](#)
- [Melanoma](#)
- [Non-small cell lung cancer](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Aneuploidy](#)
- [Asthma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Barrett Esophagus](#)
- [Bile Duct Neoplasms](#)
- [Birth Weight](#)
- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)

- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chagas Disease](#)
- [Cholangiocarcinoma](#)
- [Cholangitis](#)
- [Chromosomal Instability](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Cystadenocarcinoma](#)
- [Diabetes](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Dysplastic Nevus Syndrome](#)
- [Eczema](#)
- [Esophageal Neoplasms](#)
- [Eye Neoplasms](#)
- [Fetal Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)

- [Glioma](#)
- [Glucose Intolerance](#)
- [Glucose Metabolism Disorders](#)
- [Head and Neck Neoplasms](#)
- [Heart Diseases](#)
- [Hemorrhage](#)
- [HIV Infections](#)
- [Hyperglycemia](#)
- [Hyperlipidemias](#)
- [Hyperlipoproteinemia Type II](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Insulin Resistance](#)
- [Intracranial Aneurysm](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Leukoplakia](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Malnutrition](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)

- [Microsatellite Instability](#)
- [Mouth Neoplasms](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Multiple Myeloma](#)
- [Myelodysplastic Syndromes](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Nevus](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Periodontitis](#)
- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)

- [Rectal Neoplasms](#)
- [Retinoblastoma](#)
- [Rhinitis](#)
- [Schizophrenia](#)
- [Skin Neoplasms](#)
- [Starvation](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Sunburn](#)
- [Urinary Bladder Neoplasms](#)
- [Uveal Neoplasms](#)
- [Vascular Diseases](#)
- [Weight Gain](#)
- [Werner syndrome](#)
- [Wolfram Syndrome](#)