

Product datasheet for **TP320937**

p16INK4A (CDKN2A) (NM_000077) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A), transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC220937 representing NM_000077 Red =Cloning site Green =Tags(s) MEPAAGSSMEPSADWLATAAARGRVEEV RALLEAGALPNAPNSYGRRP IQVMMMGSARVAELLLLHGAE P NCADPATLTRPVHDAAREGFLDTLVV LHRAGARLDVRDAWGRLPVDLAEELGHRDVARYL RAAAGGTRG S NHARIDAAEGPSDIPD TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Predicted MW:	16.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_000068</u>
Locus ID:	1029



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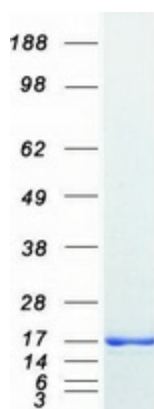
UniProt ID:	P42771
RefSeq Size:	1163
Cytogenetics:	9p21.3
RefSeq ORF:	468
Synonyms:	ARF; CDK4I; CDKN2; CMM2; INK4; INK4A; MLM; MTS-1; MTS1; P14; P14ARF; P16; P16-INK4A; P16INK4; P16INK4A; P19; P19ARF; TP16

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, the E3 ubiquitin-protein ligase MDM2, 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, Sep 2012]

Protein Families: Druggable Genome

Protein Pathways: Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer

Product images:



Coomassie blue staining of purified CDKN2A protein (Cat# TP320937). The protein was produced from HEK293T cells transfected with CDKN2A cDNA clone (Cat# [RC220937]) using MegaTran 2.0 (Cat# [TT210002]).