

Product datasheet for TP501211

OriGene Technologies, Inc.

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Cdkn1a (NM_001111099) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse cyclin-dependent kinase inhibitor 1A (P21) (Cdkn1a),

with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone >MR201211 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSNPGDVRPVPHRSKVCRCLFGPVDSEQLRRDCDALMAGCLQEARERWNFDFVTETPLEGNFVWERVRSL GLPKVYLSPGSRSRDDLGGDKRPSTSSALLQGPAPEDHVALSLSCTLVSERPEDSPGGPGTSQGRKRRQT

SLTDFYHSKRRLVFCKRKP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 17.8 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

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 after receiving vials.

Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 001104569

Locus ID: 12575

UniProt ID: <u>P39689</u>, <u>Q564P6</u>

RefSeq Size: 1936

Cytogenetics: 17 15.12 cM



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RefSeq ORF: 480

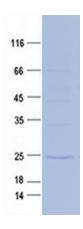
Synonyms: CAP; CAP20; CDK; CDKI; Cdkn; Cdkn1; CI; CIP1; mda; mda6; P2; P21; p21C; p21Cip1; p21W;

p21WAF; SD; SDI1; Waf; Waf1

Summary: This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to

and inhibits the activity of cyclin-cyclin-dependent kinase2 or cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at the G1 pahse. 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, 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 cyclin-dependent kinase2, and may be instrumental in the execution of apoptosis following caspase activation. Mice that lack this gene have the ability to regenerate damaged or missing tissue. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Product images:



Purified recombinant protein Cdkn1a was analyzed by SDS-PAGE gel and Coomossie Blue Staining.