## Proteintech ${ }_{\text {Antibodies } \mid \text { Euss kits }}$ | Proteins

 www.ptglab.comCatalog Number:67362-1-PBS

| Basic Information | Catalog Number: 67362-1-PBS | GenBank Accession Number: NM_001111099 | Purification Method: <br> Protein A purification |
| :---: | :---: | :---: | :---: |
|  | Size: | GeneID (NCBI): | CloneNo.: |
|  | $1 \mathrm{mg} / \mathrm{ml}$ | 12575 | 3C7D3 |
|  | Source: | UNIPROT ID: |  |
|  | Mouse | P39689 |  |
|  | Isotype: | Full Name: |  |
|  | IgG2b | cyclin-dependent kinase inhibitor 1A |  |
|  | Immunogen Catalog Number: | (P21) |  |
|  | AG28394 | Calculated MW: |  |
|  |  | 18 kDa |  |

## Applications

Tested Applications:
IF,ELISA
Species Specificity:
mouse

Background Information
CDKN1A (p21, CIP1, WAF1) is a cyclin-dependent kinase inhibitor. CDKN1A binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at the G1 phase. The expression of CDKN1A is induced by wild-type but not mutant p53 protein, through which CDKN1A mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. CDKN1A can interact with proliferating cell nuclear antigen (PCNA), and plays a regulatory role in S phase DNA replication and DNA damage repair. CDKN1A 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.

Storage

Storage:
Store at $-20^{\circ} \mathrm{C}$. Stable for one year after shipment.
Storage Buffer:
PBS only
Aliquoting is unnecessary for $-20^{\circ} \mathrm{C}$ storage

Selected Validation Data


Immunofluorescent analysis of (4\% PFA) fixed
$\mathrm{NIH} / 3 T 3$ cells using $67362-1-\lg$ (p21 antibody) at
dilution of 1:100 and CoraLite488-Conjugated
AffiniPure Goat Anti-Mouse $\operatorname{lgG}(\mathrm{H}+\mathrm{L})$. This data was developed using the same antibody clone with 67362-1-PBS in a different storage buffer
formulation.

