For Research Use Only

p21 Monoclonal antibody

Catalog Number:67362-1-lg 9 Publications



Purification Method:

Basic Information

Catalog Number: GenBank Accession Number:

67362-1-lg NM_001111099 Protein A purification GeneID (NCBI):

Size: CloneNo.: 150ul, Concentration: 1800 ug/ml by 12575 3C7D3 Nanodrop and 1000 ug/ml by Bradford_{UNIPROT ID:}

Recommended Dilutions: method using BSA as the standard; P39689 IF/ICC 1:50-1:500

Source: Full Name:

Mouse cyclin-dependent kinase inhibitor 1A

Isotype: (P21)

IgG2b Calculated MW:

18 kDa Immunogen Catalog Number:

AG28394

Applications

Tested Applications:

IF/ICC. FIISA

Cited Applications:

IF

Species Specificity:

mouse

Cited Species:

human, mouse, canine

Background Information

 ${\tt CDKN1A\ (p21,CIP1,WAF1)\ is\ a\ cyclin-dependent\ kinase\ inhibitor.\ CDKN1A\ binds\ to\ and\ inhibits\ the\ activity\ of\ and\ constraints\ of\ constrain$ 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.

Positive Controls:

IF/ICC: NIH/3T3 cells,

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------|-----------|-------------------|-------------|
| Xiaofang Zhu | 36174712 | Life Sci | |
| Xiaoyu Qi | 35837283 | Front Pharmacol | |
| Weili Wang | 39896347 | Noncoding RNA Res | IF |

Storage

Storage:

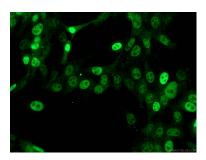
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

*** 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using 67362-1-1g (p21 antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).