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#2896 Store at -20C

## p18 INK4C (DCS118) Mouse mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 18	<b>Source/Isotype:</b> Mouse IgG2a	<b>UniProt ID:</b> #P42773	<b>Entrez-Gene Id:</b> 1031
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### Product Usage Information

#### Application

 Western Blotting  
Immunoprecipitation

#### Dilution

 1:1000  
1:50

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

The p18 INK4C (DCS118) Mouse mAb detects endogenous levels of p18 INK4C protein. The antibody does not cross-react with other proteins of the INK4 family.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with purified recombinant human p18 INK4C protein.

### Background

Cyclin-dependent kinases (CDKs) are activated in part by forming complexes with cyclins. For example, CDK4 and CDK6 associate with the D-type cyclins and phosphorylate the retinoblastoma protein. This phosphorylation is a necessary event for cells to enter S-phase (1). The inhibitors of CDK4 (INK4) family include p15 INK4B, p16 INK4A, p18 INK4C and p19 INK4D. p18 has been shown to function as a haploinsufficient tumor suppressor *in vivo* (2). All INK4 proteins are composed of 32 amino acid ankyrin motifs and selectively inhibit CDK4/6 activity. Mutational analyses of p18 implicate the third and the amino-terminal portion of the fourth ankyrin repeat in mediating binding to CDK4/6 (3). The interaction of INK4 family members can be a binary complex with CDK4/6 or ternary complex with cyclin D-bound CDK4/6 and ultimately results in the inhibition of cell cycle progression (4,5).

### Background References

- Lukas, J. et al. (1996) *Mol. Cell. Biol.* 16, 6917-6925.
- Bai, F. et al. (2003) *Mol. Cell. Biol.* 23, 1269-1277.
- Noh, S.J. et al. (1999) *Cancer Res.* 59, 558-564.
- Guan, K.L. et al. (1994) *Genes Dev.* 8, 2939-2952.
- Hirai, H. et al. (1995) *Mol. Cell. Biol.* 15, 2672-2681.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** Human

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