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#80772**p16 INK4A (D7C1M) Rabbit mAb**

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

<b>Applications:</b> W, IP, FC-FP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 16	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P42771	<b>Entrez-Gene Id:</b> 1029
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Flow Cytometry (Fixed/Permeabilized)

**Dilution**

1:1000  
1:50  
1:3200

**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.

For a carrier free (BSA and azide free) version of this product see product #50604.

**Specificity/Sensitivity**

p16 INK4A (D7C1M) Rabbit mAb recognizes endogenous levels of total p16 INK4A protein. This antibody does not cross-react with p15 INK4B. This antibody is not recommended for use in immunohistochemistry.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala143 of human p16 INK4A protein.

**Background**

Members of the INK4 family of cyclin-dependent kinase inhibitors include p16 INK4A, p15 INK4B, p18 INK4C, and p19 INK4D. The INK4 family members inhibit cyclin-dependent kinases 4 and 6 (CDK4 and CDK6), causing cell cycle arrest in G1 phase. The INK4A-ARF-INK4B locus on chromosome 9p21, frequently lost in human cancer, encodes the INK4 family members p16 INK5A and p15 INK4B, as well as the unrelated protein, ARF (1).

p16 INK4A expression, typically repressed in the absence of stress, is thought to drive cells into senescence, and p16 INK4A expression is a commonly used marker of senescent cells (2,3). p16 INK4A protein expression is often altered in human cancer, and high expression is currently used as a predictive biomarker in cervical cancer (3-5).

**Background References**

1. Kim, W.Y. and Sharpless, N.E. (2006) *Cell* 127, 265-75.
2. LaPak, K.M. and Burd, C.E. (2014) *Mol Cancer Res* 12, 167-83.
3. Romagosa, C. et al. (2011) *Oncogene* 30, 2087-97.
4. Ishikawa, M. et al. (2006) *Int J Gynecol Cancer* 16, 347-53.
5. Queiroz, C. et al. (2006) *Pathol Res Pract* 202, 77-83.

**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 BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

**Cross-Reactivity Key**

**H:** Human

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