

#3698 Store at -20°C

p27 Kip1 (SX53G8.5) Mouse mAb



100 µl
 (10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IF-IC Endogenous	H, M, R, Mk	27 kDa	Mouse IgG1**

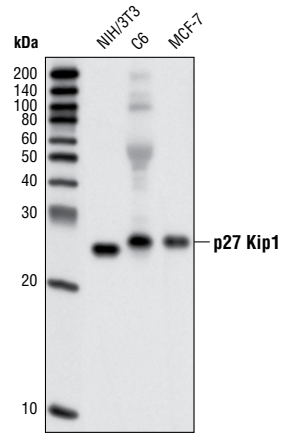
Background: p27 Kip1 is a member of the Cip/Kip family of cyclin-dependent kinase inhibitors. Like its relatives, p57 Kip2 and p21 Waf1/Cip1, the ability to enforce the G1 restriction point is derived from its inhibitory binding to CDK2/cyclin E and other CDK/cyclin complexes. Expression levels of p27 are upregulated in quiescent cells and in cells treated with cAMP or other negative cell cycle regulators. Downregulation of p27 can be induced by treatment with interleukin 2 or other mitogens; this involves phosphorylation of p27 and its degradation by the ubiquitin-proteasome pathway (1-4).

Specificity/Sensitivity: p27 Kip1 (SX53G8.5) Mouse mAb detects endogenous levels of total p27 Kip1 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with recombinant human p27 Kip1.

Background References:

- (1) Lloyd, R.V. et al. (1999) *Am. J. Pathol.* 154, 313-323.
- (2) Polyak, K. et al. (1994) *Genes Dev.* 8, 9-22.
- (3) Kato, J.Y. et al. (1994) *Cell* 79, 487-496.
- (4) Vlach, J. et al. (1997) *EMBO J.* 16, 5334-5344.



Western blot analysis of extracts from NIH/3T3, C6 and MCF-7 cells using p27 Kip1 (SX53G8.5) Mouse mAb.

Entrez-Gene ID #1027
Swiss-Prot Acc. #P46527

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.

***Species cross-reactivity is determined by western blot.**

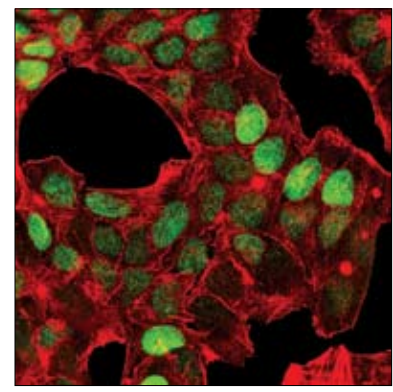
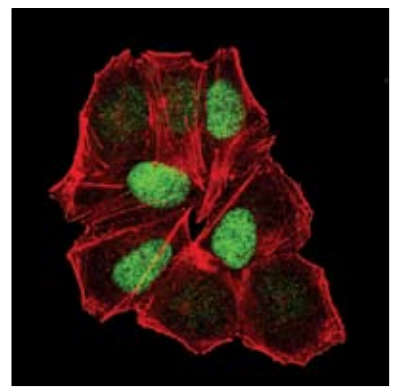
****Anti-mouse secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:1600

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.



Confocal immunofluorescent analysis of MCF-7 cells using p27 Kip1 (SX53G8.5) Mouse mAb (green). Actin filaments have been labeled with DY-554 phalloidin (red).

IMPORTANT: For western blots, incubate membrane with diluted 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 IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.