

# p27Kip1 (Mitotic Inhibitor/Suppressor Protein) Antibody

Mouse Monoclonal Antibody [Clone SX53G8]

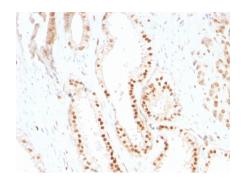
Catalog No	Format	Size
1027-MSM1-P0	Purified Ab with BSA and Azide	200ug/ml
1027-MSM1-P1	Purified Ab with BSA and Azide	200ug/ml
1027-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

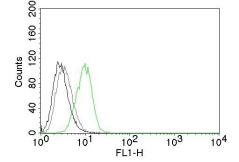
Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml

Product Details		
Clone	SX53G8	
Gene Name	CDKN1B	
Immunogen	Purified GST-p27 fusion protein of human origin	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG1	
Mol. Weight of Antigen	25-26kDa	
Cellular Localization	Cytoplasm, Endosome, Nucleus	
Species Reactivity	Human, Monkey, Mouse, Rat	
Positive Control	ZR75	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

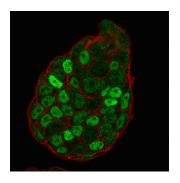
## Product Images for p27Kip1 (Mitotic Inhibitor/Suppressor Protein) Antibody



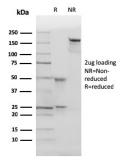


Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with p27 Mouse Monoclonal Antibody (SX53G8).

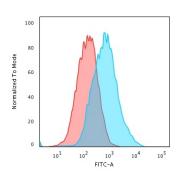
Flow Cytometry of human p27 on HeLa cells. Black: cells alone; Grey: Isotype Control; Green: AF488-labeled p27 Mouse Monoclonal Antibody (SX53G8).



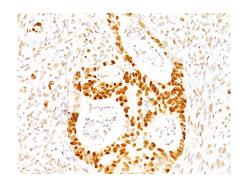
Immunofluorescence Analysis of PFA-fixed MCF-7 cells labeling p27 with p27 Mouse Monoclonal Antibody (SX53G8) followed by Goat anti-Mouse IgG-CF488 (Green). Membrane is stained with Phalloidin-CF640



SDS-PAGE Analysis of Purified p27 Mouse Monoclonal Antibody (SX53G8). Confirmation of purity and integrity.



Flow Cytometric Analysis of PFA-fixed MCF-7 cells using p27 Mouse Monoclonal Antibody (SX53G8) followed by Goat anti- Mouse- IgG-CF488 (Blue); Isotype Control (Red).



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with p27 Mouse Monoclonal Antibody (SX53G8).

#### **Specificity & Comments**

This MAb recognizes a 27kDa protein, identified as the p27Kip1, a cell cycle regulatory mitotic inhibitor. It is highly specific and shows no cross-reaction with other related mitotic inhibitors. In Western blotting of cell lysates from 7 human breast cancer cell lines (ZR75-1, ZR75-30, MCF-7, MDAMB453, T47D, CAL51, 734B), the antibody labels a single band corresponding to p27Kip1. It functions as a negative regulator of G1 progression and has been proposed to function as a possible mediator of TGF- induced G1 arrest. p27Kip1 is a candidate tumor suppressor gene. Reportedly, low p27 expression has been associated with unfavorable prognosis in renal cell carcinoma, colon carcinoma, breast carcinomas, non-small-cell lung carcinoma, hepatocellular carcinoma, multiple myeloma, and lymph node metastases in papillary carcinoma of the thyroid, as well as a more aggressive phenotype in carcinoma of the cervix.

### **Research Areas**

Cancer, Cardiovascular, Immunology, AKT Signaling, Cytokine Signaling, Infectious Disease, Lung Cancer, Nuclear Marker, Ovarian Cancer, Signal Transduction, Transcription Factors

#### **Known Applications & Suggested Dilutions**

Flow Cytometry (1-2ug/million cells) | Immunofluorescence (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (0.25-0.5ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

## Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

#### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

