

Product datasheet for AM10127PU-S

OriGene Technologies, Inc.

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p27 KIP 1 (CDKN1B) Mouse Monoclonal Antibody [Clone ID: SX53G8]

Product data:

Product Type: Primary Antibodies

Clone Name: SX53G8

Applications: FC, IF, IHC, WB

Recommended Dilution: Western Blotting: 0.5-1 µg/ml.

Flow Cytometry: $0.5-1~\mu g/10^6$ cells in $100~\mu l$.

Immunofluorescence: 0.5-1 µg/ml.

Immunohistochemistry on Formalin-Fixed Paraffin Sections: 0.5-1 µg/ml for 30 minutes

at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH

6.0, for 10-20 min followed by cooling at RT for 20 minutes.

Positive Control: ZR75, T47D, SK-BR-3, MDA-MB-231, MCF7 cells. Tonsil, Breast or Colon

Carcinoma.

Reactivity: Human, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Purified GST-p27 fusion protein of human origin.

Specificity: This Monoclonal Antibody (Clone SX53G8) recognizes a 27kDa protein, identified as the

p27^{Kip1}, a cell cycle regulatory mitotic inhibitor. It is highly specific and shows no cross-reaction with other related mitotic inhibitors. p27^{Kip1} functions as a negative regulator of G1 progression and has been proposed to function as a possible mediator of TGF-beta induced

G1 arrest. p27^{Kip1} is a candidate tumor suppressor gene.

This Monoclonal Antibody (Clone SX53G8) co-precipitates cdk4 in complex with p27Kip1

and is excellent for staining of formalin-fixed tissues.

Cellular Localization: Nuclear.

Formulation: 10mM PBS

State: Purified

State: Liquid purified IgG fraction from Bioreactor Concentrate

Stabilizer: 0.05% BSA

Preservative: 0.05% Sodium Azide





Concentration: lot specific

Purification: Protein A/G Chromatography

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 25-26 kDa

Gene Name: cyclin-dependent kinase inhibitor 1B

Database Link: Entrez Gene 1027 Human

P46527

Background: Cell cycle progression is regulated by cyclins and their cognate Cdks. p27 KIP 1 is a cell cycle

regulatory mitotic inhibitor of cdk activity. p27 KIP 1 is a candidate tumor suppressor gene, and has been proposed to function as a possible mediator of TGF beta induced G1 arrest. p27 KIP 1 is up regulated in response to antimitogenic stimuli. The increased protein

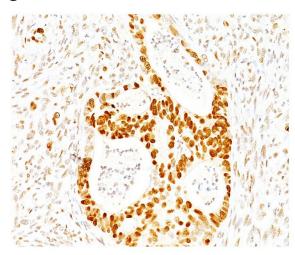
expression of p27 results in cellular arrest by binding to cyclin/Cdk complexes such as cyclin

D1/Cdk4.

p27 Kip1 is regulated by phosphorylation on serine 10 (S10) and threonine 187 (T187). Phosphorylation by CDK2 on T187 results in ubiquitylation and degradation of p27 Kip 1; while phosphorylation by hKIS on S10 signals the nuclear export to the cytoplasm.

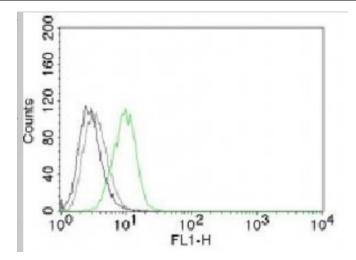
Synonyms: p27Kip1

Product images:



Formalin-Fixed, Paraffin-Embedded Human colon stained with CDKN1B / KIP1 Antibody (Clone SX53G8).





Flow Cytometry of Human p27 on HeLa Cells.