EMPOWER YOUR RESEARCH

## Product datasheet for AM10127PU-S

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

## Product data:

Product Type:
Clone Name:
Applications:
Recommended Dilution:

Primary Antibodies
SX53G8
FC, IF, IHC, WB
Western Blotting: $0.5-1 \mu \mathrm{~g} / \mathrm{ml}$.
Flow Cytometry: 0.5-1 $\mu \mathrm{g} / 106$ cells in $100 \mu \mathrm{l}$.
Immunofluorescence: $0.5-1 \mu \mathrm{~g} / \mathrm{ml}$.
Immunohistochemistry on Formalin-Fixed Paraffin Sections: $0.5-1 \mu \mathrm{~g} / \mathrm{ml}$ for 30 minutes at RT.
Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM 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:
Isotype:
Clonality:
Immunogen:
Specificity:

Formulation:

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|  | Flow Cytometry: $0.5-1 \mu \mathrm{~g} / 106$ cells in $100 \mu \mathrm{l}$. <br> Immunofluorescence: $0.5-1 \mu \mathrm{~g} / \mathrm{ml}$. <br> Immunohistochemistry on Formalin-Fixed Paraffin Sections: $0.5-1 \mu \mathrm{~g} / \mathrm{ml}$ for 30 minutes at RT. <br> Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. <br> 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 p27Kip1, a cell cycle regulatory mitotic inhibitor. It is highly specific and shows no crossreaction with other related mitotic inhibitors. p27Kip1 functions as a negative regulator of G1 progression and has been proposed to function as a possible mediator of TGF-beta induced G1 arrest. p27Kip1 is a candidate tumor suppressor gene. <br> This Monoclonal Antibody (Clone SX53G8) co-precipitates cdk4 in complex with p27Kip1 and is excellent for staining of formalin-fixed tissues. <br> Cellular Localization: Nuclear. |
| Formulation: | 10 mM PBS <br> State: Purified <br> State: Liquid purified IgG fraction from Bioreactor Concentrate <br> Stabilizer: 0.05\% BSA <br> Preservative: 0.05\% Sodium Azide |


| Concentration: | lot specific |
| :---: | :---: |
| Purification: | Protein A/G Chromatography |
| Conjugation: | Unconjugated |
| Storage: | Store undiluted at $2-8^{\circ} \mathrm{C}$. |
| 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. <br> 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).


