

#### OriGene Technologies, Inc.

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## Product datasheet for AM33273PU-T

### p27 KIP 1 (CDKN1B) Mouse Monoclonal Antibody [Clone ID: SPM348]

#### **Product data:**

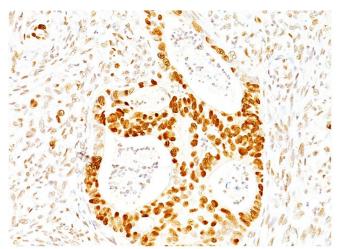
| Product Type:         | Primary Antibodies   |
|-----------------------|--|
| Clone Name:           | SPM348   |
| Applications:         | FC, IF, IHC, WB  |
| Recommended Dilution: | <ul> <li>Western Blot: 0.5-1 μg/ml.</li> <li>Flow Cytometry: 0.5-1 μg/10<sup>6</sup> cells.</li> <li>Immunofluorescence: 0.5-1 μg/ml.</li> <li>Immunohistochemistry on Formalin-Fixed Paraffin Sections: 0.5-1 μg/ml for 30 minutes at RT.</li> <li>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.</li> <li><i>Positive Control:</i> ZR75, T47D, SK-BR-3, MDA-MB-231, MCF7 cells. Tonsil, Breast or Colon Ca.</li> </ul>  |
| Reactivity:           | Human, Monkey, Mouse, Rat  |
| Host:                 | Mouse  |
| lsotype:              | lgG1   |
| Clonality:            | Monoclonal   |
| Immunogen:            | Purified GST-p27 fusion protein of human origin.   |
| Specificity:          | This Monoclonal Antibody (Clone SPM348) recognizes a 27kDa protein, identified as the p27 <sup>Kip1</sup> , a cell cycle regulatory mitotic inhibitor. It is highly specific and shows no cross-reaction with other related mitotic inhibitors. p27 <sup>Kip1</sup> 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 <sup>Kip1</sup> is a candidate tumor suppressor gene.<br>This Monoclonal Antibody (Clone SPM348) is excellent for staining of formalin-fixed tissues.<br><i>Cellular Localization</i> : Nuclear. |
| Formulation:          | 10mM 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   |



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| <b>GRIGENE</b> p27 K    | IP 1 (CDKN1B) Mouse Monoclonal Antibody [Clone ID: SPM348] – AM33273PU-T   |
|-------------------------|--|
| 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:          | <u>Entrez Gene 1027 Human</u><br><u>P46527</u>   |
| 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 SPM348).

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