

## Product datasheet for **AM33273PU-S**

### **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:	<b>Western Blot:</b> 0.5-1 µg/ml. <b>Flow Cytometry:</b> 0.5-1 µg/10 <sup>6</sup> cells. <b>Immunofluorescence:</b> 0.5-1 µg/ml. <b>Immunohistochemistry on Formalin-Fixed Paraffin Sections:</b> 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. <b>Positive Control:</b> ZR75, T47D, SK-BR-3, MDA-MB-231, MCF7 cells. Tonsil, Breast or Colon Ca.
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 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. This Monoclonal Antibody (Clone SPM348) is excellent for staining of formalin-fixed tissues. <b>Cellular Localization:</b> 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



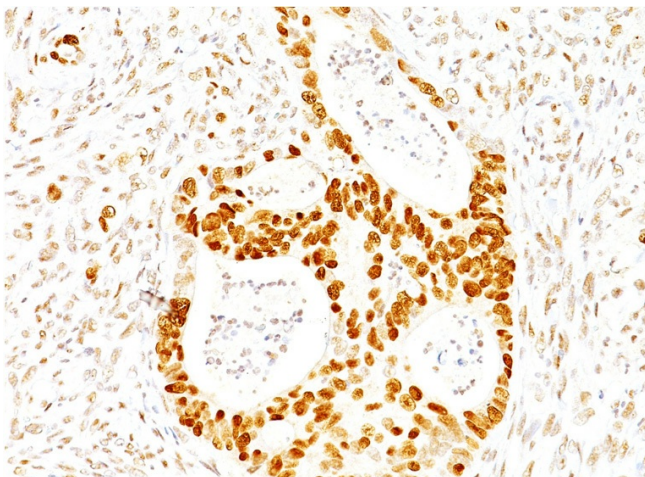
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<b>Purification:</b>	Protein A/G Chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store undiluted at 2-8°C.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Predicted Protein Size:</b>	25-26 kDa
<b>Gene Name:</b>	cyclin-dependent kinase inhibitor 1B
<b>Database Link:</b>	<a href="#">Entrez Gene 1027 Human P46527</a>

**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 antimetogenic 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).