

# p27 / KIP1 Monoclonal Mouse Antibody (SX53G8)



## **Product Description**

This MAb recognizes a 27 kDa 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-betanduced 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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0669, Anti-KIP1 (SX53G8)

#### Call us : 800-304-5357 Email: techsupport@biotium.com

### Product attributes

| Product attributes                       |   |  |  |
|--|---|--|--|
| Antibody number                          | #0669   |  |  |
| Antibody reactivity (target)             | KIP1, p27   |  |  |
| Antibody type                            | Primary   |  |  |
| Host species                             | Mouse   |  |  |
| Clonality                                | Monoclonal  |  |  |
| Clone                                    | SX53G8  |  |  |
| Isotype                                  | IgG1, kappa   |  |  |
| Molecular weight                         | 25-26 kDa   |  |  |
| Synonyms                                 | CDKN1B, CDKN4, Cyclin Dependent Kinase Inhibitor 1B,<br>Cyclin-dependent kinase inhibitor p27 Kip1, KIP1, MEN1B,<br>MEN4  |  |  |
| Human gene symbol                        | CDKN1B  |  |  |
| Entrez gene ID                           | 1027  |  |  |
| SwissProt                                | P46527  |  |  |
| Unigene                                  | 238990  |  |  |
| Immunogen                                | Purified GST-p27 fusion protein of human origin   |  |  |
| Antibody target cellular<br>localization | Nucleus   |  |  |
| Verified antibody<br>applications        | Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified)   |  |  |
| Species reactivity                       | Human, Monkey, Mouse, Rat   |  |  |
| Expected antibody<br>applications        | IP (published for clone), WB (published for clone)  |  |  |
| Antibody application notes               | Higher concentration may be required for direct detection using<br>primary antibody conjugates than for indirect detection with<br>secondary antibody, Immonfluorescence: 0.5-1 ug/mL,<br>Immunohistology formalin-fixed 0.25-0.5 ug/mL, Staining of<br>formalin-fixed tissues requires boiling tissue sections in 10 mM<br>citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for<br>20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL,<br>Western blotting 0.5-1 ug/mL, Optimal dilution for a specific<br>application should be determined by user |  |  |
| Positive control                         | ZR75, T47D, SK-BR-3, MDA-MB-231, HeLa or MCF7 cells.<br>Tonsil, Breast, Cervical or Colon Carcinoma.  |  |  |
| Shipping condition                       | Room temperature  |  |  |
| Storage Conditions                       | Store at 2 to 8 $^\circ$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ$ C   |  |  |
| Shelf life                               | Guaranteed for at least 24 months from date of receipt when stored as recommended   |  |  |
| Regulatory status                        | For research use only (RUO)   |  |  |
| Antibody/conjugate<br>formulation        | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP<br>conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL<br>in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in<br>PBS without azide  |  |  |
| Antibody research areas                  | Cell cycle, Tumor suppressors   |  |  |
| Product origin                           | Product may contain either bovine serum albumin (BSA) from<br>bovine serum (Bos taurus), or recombinant BSA produced in<br>Chinese hamster ovary cells. Inquire for the specific lot.   |  |  |

| Antibody # prefix | Conjugation           | Ex/Em (nm) | Laser line | Detection channel           | Dye Features     |
|-------------------|-----------------------|------------|------------|-----------------------------|------------------|
| BNC04             | CF®405S               | 404/431    | 405        | DAPI (microscopy),<br>AF405 | CF®405S Features |
| BNC88             | CF®488A               | 490/515    | 488        | GFP, FITC                   | CF®488A Features |
| BNC68             | CF®568                | 562/583    | 532, 561   | RFP, TRITC                  | CF®568 Features  |
| BNC94             | CF®594                | 593/614    | 561        | Texas Red®                  | CF®594 Features  |
| BNC40             | CF®640R               | 642/662    | 633-640    | Cy®5                        | CF®640R Features |
| BNC47             | CF®647                | 650/665    | 633-640    | Cy®5                        | CF®647 Features  |
| BNC74             | CF®740                | 742/767    | 633-685    | 775/50                      | CF®740 Features  |
| BNCB              | Biotin                | N/A        | N/A        | N/A                         |                  |
| BNUB              | Purified              | N/A        | N/A        | N/A                         |                  |
| BNUM              | Purified,<br>BSA-free | N/A        | N/A        | N/A                         |                  |

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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. PNAS USA (1997) 94:6380-6385. (western; immunoprecipitation; IHC, FFPE)

2. Blood (2005) 105(9): 3691. (western)

3. Anticancer Res (2017) 37: 2407-2415. (IHC, FFPE; IF, western)