## 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)

## 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)

Call us: 800-304-5357

<b>Product attributes</b>			
Antibody number	#0669		
Antibody reactivity	KIP1, p27		
(target) 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, Cyclin-dependent kinase inhibitor p27 Kip1, KIP1, MEN1B, 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	Nucleus		
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified)		
Species reactivity	Human, Monkey, Mouse, Rat		
Expected antibody applications	IP (published for clone), WB (published for clone)		
Antibody application	Higher concentration may be required for		
notes	direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Staining of formalin-fixed 0.5-0.5 ug/mL, 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, Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user		
Positive control	direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.25-0.5 ug/mL, 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, Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Western blotting 0.5-1 ug/mlL, Optimal dilution for a specific application		
	direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.25-0.5 ug/mL, 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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user  ZR75, T47D, SK-BR-3, MDA-MB-231, HeLa or MCF7 cells. Tonsil, Breast,		
Positive control	direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.25-0.5 ug/mL, 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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user  ZR75, T47D, SK-BR-3, MDA-MB-231, HeLa or MCF7 cells. Tonsil, Breast, Cervical or Colon Carcinoma.		
Positive control Shipping condition	direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Staining of formalin-fixed 0.25-0.5 ug/mL, 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, Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Western biotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user  ZR75, T47D, SK-BR-3, MDA-MB-231, HeLa or MCF7 cells. Tonsil, Breast, Cervical or Colon Carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store		
Positive control Shipping condition Storage Conditions	direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Staining of formalin-fixed 0.25-0.5 ug/mL, Staining of formalin-fixed tissues requires boilling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimad dilution for a specific application should be determined by user  ZR75, T47D, SK-BR-3, MDA-MB-231, HeLa or MCF7 cells. Tonsil, Breast, Cervical or Colon Carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as		
Positive control Shipping condition Storage Conditions Shelf life	direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-1 ug/mL, Immunofluorescence: 0.5-0.5 ug/mL, Staining of formalin-fixed 0.25-0.5 ug/mL, Staining of formalin-fixed tissues requires boilling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user  ZR75, T47D, SK-BR-3, MDA-MB-231, HeLa or MCF7 cells. Tonsil, Breast, Cervical or Colon Carcinoma.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended		

Email: btinfo@biotium.com

Antibody # prefix BNC04	Conjugation CF®405S	<b>Ex/Em (nm)</b> 404/431	<b>Laser line</b> 405	Detection channel DAPI (microscopy), AF405	Dye Features <a href="mailto:CF®405S Features">CF®405S Features</a>
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
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, LI-COR Bioscience.