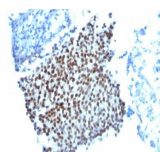


p21 / WAF1 Monoclonal Mouse Antibody (WA-1)



Product Description

This MAb recognizes a 21 kDa protein, identified as the p21WAF1 tumor suppressor protein. This MAb is highly specific to p21 and shows no cross-reaction with other closely related mitotic inhibitors. p21WAF1 is a specific inhibitor of cdk s and a tumor suppressor involved in the pathogenesis of a variety of malignancies. The expression of this gene acts as an inhibitor of the cell cycle during G1 phase and is tightly controlled by the tumor suppressor protein p53. Its expression is induced by the wild type, but not mutant, p53 suppressor protein. Normal cells generally display a rather intense nuclear p21 expression. Loss of p21 expression has been reported in many carcinomas (gastric carcinoma, non-small cell lung carcinoma, thyroid carcinoma). In ELISA, MAb WA-1 is useful either as a solid phase or for detection of p21 protein.

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 0043, Anti-p21 (WA-1)

Product attributes

Antibody number	#0043
Antibody reactivity (target)	p21, WAF1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	WA-1
Isotype	IgG1, kappa
Molecular weight	21 kDa
Synonyms	Activating Fragment 1; CAP20; CDK-interacting protein 1; CDKI; CDKN1; CDKN1A; CIP1; Cyclin-dependent kinase inhibitor 1A (p21; Cip1); DNA Synthesis Inhibitor; MDA6; Melanoma Differentiation Associated Protein 6; p21Cip1/Waf1; PIC1; SDI1; SLC12A9; Wild type p53 activated fragment 1 (WAF1)
Human gene symbol	CDKN1A
Entrez gene ID	1026
SwissProt	P38936
Unigene	370771
Immunogen	Human recombinant p21 protein
Verified antibody applications	IHC (FPPE) (verified)
Antibody target cellular localization	Nucleus
Species reactivity	Chimpanzee, Human, Monkey, Mouse, Rat
Expected antibody applications	Flow (intracellular) (published for clone), IF (published for clone), WB (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Immunohistology formalin-fixed 0.5-1 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. Optimal dilution for a specific application should be determined by user
Positive control	HeLa Cells. Skin, colon, or breast carcinoma.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °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 formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cell cycle, Tumor suppressors
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in 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), 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, BSA-free	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, and Odyssey are registered trademarks of LI-COR Bioscience.

References

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

1. J Biol Chem (2001) 276(14): 11143-11150. (Flow, intracellular; IF)
2. EMBO J (2002) 21:6771-6780. (WB)

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Product link: <https://biotium.com/product/monoclonal-anti-p21-waf1-wa-1/>

