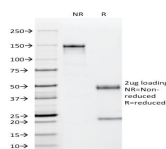


# p53 Tumor Suppressor Monoclonal Mouse Antibody (PAb122)



## Product Description

Mutation and/or allelic loss of p53 is one of the causes of a variety of mesenchymal and epithelial tumors. If it occurs in the germ line, such tumors run in families. p53 Binds to a DNA consensus sequence, the p53 response element, and it regulates normal cell growth cycle events by activating transcription of genes, involved either in progression through the cycle, or causing arrest in G1 when the genome is damaged. In most transformed and tumor cells the concentration of p53 is increased 51000 fold over the minute concentrations (1000 molecules cell) in normal cells, principally due to the increased half-life (4 h) compared to that of the wild-type (20 min). p53 Localizes in the nucleus, but is detectable at the plasma membrane during mitosis and when certain mutations modulate cytoplasmic/nuclear distribution. p53 Is the most commonly mutated gene in spontaneously occurring human cancers. Mutations arise with an average frequency of 70% but incidence varies from zero in carcinoid lung tumors to 97% in primary melanomas. High concentrations of p53 protein are transiently expressed in human epidermis and superficial dermal fibroblasts following mild ultraviolet irradiation. PAb122 binds to the C-terminus (aa370-378) of both wild type and mutated p53. When microinjected into nuclei, PAb122 blocked re-entry into the S-phase of the cell cycle.

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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0338, Anti-p53 (PAb122)**

## Product attributes

<b>Antibody number</b>	#0338
<b>Antibody reactivity (target)</b>	p53 Tumor Suppressor Protein
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	PAb122
<b>Isotype</b>	IgG2b, kappa
<b>Molecular weight of antigen</b>	53 kDa
<b>Synonyms</b>	Antigen NY-CO-13, BCC7, Cellular Tumor Antigen p53, LFS1, TP53, Transformation Related Protein 53 (TRP53), Tumor Protein p53, Tumor Suppressor p53
<b>Human gene symbol</b>	TP53
<b>Entrez gene ID</b>	7157
<b>SwissProt</b>	P04637
<b>Unigene</b>	654481
<b>Immunogen</b>	SV40-transformed mouse B4 cells
<b>Antibody target cellular localization</b>	Nucleus
<b>Species reactivity</b>	Dog, Hamster, Human, Monkey, Mouse, Rat
<b>Expected antibody applications</b>	Flow (intracellular) (published for clone), IF (published for clone), IP (published for clone), WB (published for clone)
<b>Antibody application notes</b>	Immunohistology Frozen Only 0.5-1.0 ug/mL, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
<b>Positive control</b>	MDA-MB-231 or A431 Cells. Breast or Colon carcinoma
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	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
<b>Validated in protein array</b>	Monospecific
<b>Antibody research areas</b>	Apoptosis, Tumor suppressors
<b>Product origin</b>	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	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
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. Mol Cell Biol (1985) 5(7): 1601-1610. (IP)
2. Mol Cell Biol (1990) 10(11): 5772-5781. (IP, IF, RIA)
3. Oncogene (1991) 6:1499-1506. (Flow, IF, IP)
4. BBRC (2009) 387: 772-777. (WB, IF)
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