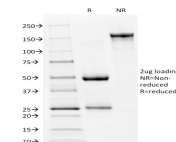


p53 Tumor Suppressor Protein Monoclonal Mouse Antibody (PAb240)



Product Description

The specificity of this monoclonal antibody to its intended target was tested by HuProt™ Array, containing more than 19,000 full-length human proteins. PAb240 binds to the C-terminus (aa213-217) of both wild type and mutated p53 in denatured samples and FFPE sections, but is reported to selectively detect mutant p53 in native samples by immunoprecipitation and ELISA. 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.

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 1634, Anti-p53 Tumor Suppressor Protein (PAb240)

Product attributes

Antibody number	#1634
Antibody reactivity (target)	p53 Tumor Suppressor Protein
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	PAb240
Isotype	IgG1, kappa
Molecular weight	53 kDa
Synonyms	Antigen NY-CO-13; BCC7; Cellular Tumor Antigen p53; LFS1; TP53; Transformation Related Protein 53 (TRP53); Tumor Protein p53; Tumor Suppressor p53
Human gene symbol	TP53
Entrez gene ID	7157
SwissProt	P04637
Unigene	654481
Immunogen	Gel-Purified p53-beta-galactosidase fusion protein containing murine p53 from aa 14-389
Antibody target cellular localization	Nucleus
Species reactivity	Cow, Dog, Hamster, Human, Monkey, Mouse, Rat
Expected antibody applications	IHC (FFPE) (published for clone), IP (published for clone), WB (published for clone)
Antibody application notes	ELISA: For coating, order Ab without BSA; Optimal dilution for a specific application should be determined., Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody
Positive control	MDA-MB-231 or A431 Cells. Breast or Colon carcinoma
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35 °C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
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
Validated in protein array	Monospecific
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
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.
Tumor expression	Bladder cancer, Breast cancer, Colorectal cancer, Lung cancer, Uterine cancer

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.

- EMBO J (1990) 9(5): 1595-1602. (IP of mutant p53; IHC; WB)
- Oncogene (2003) 22: 4478-4487. (ELISA, mutant p53)
- Anticancer Res (2006) 26: 175-182. (IHC, FFPE)