

# p53 Tumor Suppressor Recombinant Monoclonal Mouse Antibody (rTP53/1739)



## **Product Description**

The specificity of this monoclonal antibody to its intended target was validated by HuProt<sup>™</sup> Array, containing more than 19,000, full-length human proteins. Recognizes a 53 kDa protein, which is identified as p53 suppressor gene product. It reacts with the mutant as well as the wild form of p53. It is a tumor suppressor protein expressed in a wide variety of tissue types and is involved in regulating cell growth, replication, and apoptosis. It binds to MDM2, SV40 T antigen and human papilloma virus E6 protein. Positive nuclear staining with p53 antibody has been reported to be a negative prognostic factor in breast, lung, colorectal, and urothelial carcinoma. Anti-p53 positivity has also been used to differentiate uterine serous carcinoma from endometrioid carcinoma as well as to detect intratubular germ cell neoplasia. Mutations involving p53 are found in many malignant tumors, including breast, ovarian, bladder, colon, lung, and melanoma.

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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2091, Anti-p53 Tumor Suppressor Protein (rTP53/1739)

## Call us : <u>800-304-5357</u> E

#### Email: techsupport@biotium.com

### Product attributes

| Product attributes                       |  |  |  |
|--|--|--|--|
| Antibody number                          | #2091  |  |  |
| Antibody reactivity (target)             | p53 Tumor Suppressor Protein   |  |  |
| Antibody type                            | Primary  |  |  |
| Host species                             | Mouse  |  |  |
| Clonality                                | Recombinant Monoclonal   |  |  |
| Clone                                    | rTP53/1739   |  |  |
| Isotype                                  | lgG1, kappa  |  |  |
| Molecular weight                         | 53 kDa   |  |  |
| Synonyms                                 | Antigen NY-CO-13, BCC7, Cellular Tumor Antigen p53, LFS1,<br>TP53, Transformation Related Protein 53 (TRP53), Tumor<br>Protein p53, Tumor Suppressor p53   |  |  |
| Human gene symbol                        | TP53   |  |  |
| Entrez gene ID                           | 7157   |  |  |
| SwissProt                                | P04637   |  |  |
| Unigene                                  | 654481   |  |  |
| Immunogen                                | Recombinant full-length human TP53 protein   |  |  |
| Antibody target cellular<br>localization | Nucleus  |  |  |
| Verified antibody<br>applications        | IHC (FFPE) (verified), WB (verified)   |  |  |
| Species reactivity                       | Human  |  |  |
| Antibody application notes               | Higher concentration may be required for direct detection using<br>primary antibody conjugates than for indirect detection with<br>secondary antibody, Immunohistology (formalin): 0.5-1.0 ug/mL<br>for 30 minutes at RT, Staining of formalin-fixed tissues requires<br>boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20<br>minutes followed by cooling at RT for 20 minutes, Optimal<br>dilution for a specific application should be determined by user |  |  |
| Positive control                         | MDA-MB-231 Cells. Breast or Colon carcinoma  |  |  |
| Shipping condition                       | Room temperature   |  |  |
| Storage Conditions                       | Store at 2 to 8 °C, Protect fluorescent conjugates from light,<br>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<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   |  |  |
| Validated in protein array               | Monospecific   |  |  |
| Antibody research areas                  | Apoptosis, 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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