

# p53 Monoclonal Antibody (BD53-12)

| Product Details    |                                 |
|--------------------|---------------------------------|
| Size               | 100 µg                          |
| Species Reactivity | Human, Mouse, Rat               |
| Published Species  | Rat, Mouse                      |
| Host/Isotope       | Mouse / IgG2a                   |
| Class              | Monoclonal                      |
| Type               | Antibody                        |
| Clone              | BD53-12                         |
| Conjugate          | Unconjugated                    |
| Immunogen          | p53.                            |
| Form               | Liquid                          |
| Concentration      | 1 mg/mL                         |
| Purification       | Protein G                       |
| Storage buffer     | PBS, pH 7.2                     |
| Contains           | 0.01% sodium azide              |
| Storage Conditions | 4°C short term, -80°C long term |
| RRID               | AB_1077419                      |

| Applications                            | Tested Dilution            | Publications   |
|---|----------------------------|----------------|
| ChIP assay (ChIP)                       | 2 µL/10 <sup>6</sup> cells | -              |
| ELISA (ELISA)                           | 1:1000                     | -              |
| Flow Cytometry (Flow)                   | 1:100                      | -              |
| Immunocytochemistry (ICC)               | 5 µg/mL                    | -              |
| Immunofluorescence (IF)                 | 5 µg/mL                    | -              |
| Immunohistochemistry (Frozen) (IHC (F)) | 1:50                       | -              |
| Immunomicroscopy (IM)                   | 1:100                      | -              |
| Immunoprecipitation (IP)                | 1:50                       | -              |
| Immunohistochemistry (IHC)              | -                          | 7 Publications |
| Western Blot (WB)                       | -                          | 1 Publication  |

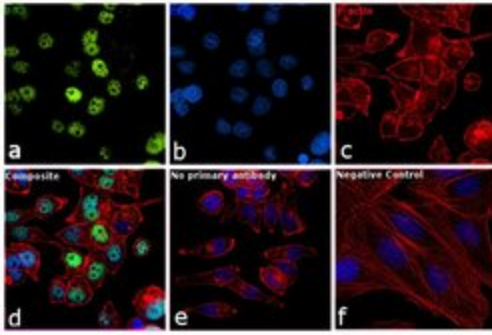
## Product Specific Information

MA1-7629 detects p53 from human, rat and mouse samples.

MA1-7629 has been successfully used in ELISA, fluorescent microscopy, flow cytometry, immunoprecipitation and immunohistochemistry (frozen) procedures.

The MA1-7629 immunogen is a p53 protein.

## Advanced Verification Data

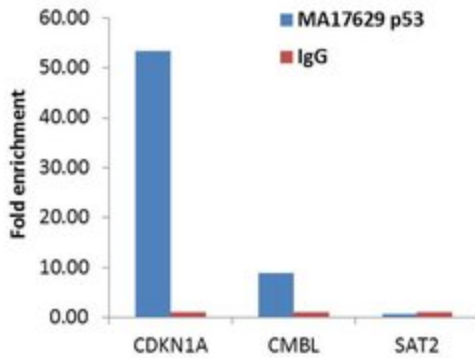


### p53 Antibody (MA1-7629)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines owing to their inherent genetic constitution. Expression of p53 was observed in T-47D compared to SKOV-3 using p53 Monoclonal Antibody (BD53-12) (Product # MA1-7629) in ICC. Relative expression validation info.

### p53 Antibody (MA1-7629)

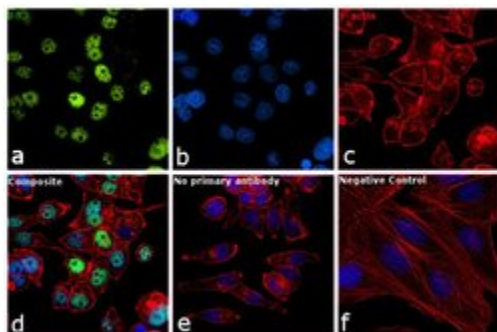
Antibody specificity was demonstrated by detection of enrichment of the target protein at specific gene loci. Chromatin Immunoprecipitation (ChIP) was performed using Anti-p53 Monoclonal Antibody (Product # MA1-7629) using PCR primer pairs over the CDKN1A and CMBL genes (active) and SAT2 satellite repeats (inactive). Relative expression validation info.



## Product Images For p53 Monoclonal Antibody (BD53-12)

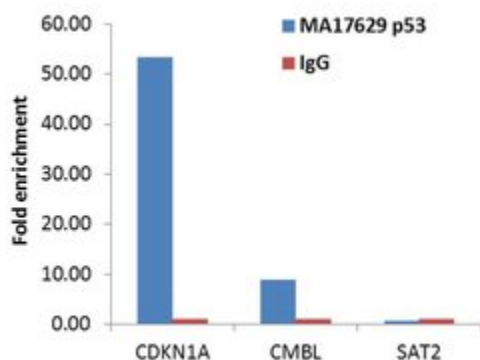
### p53 Antibody (MA1-7629) in ICC

Immunofluorescence analysis of p53 was performed using 70% confluent log phase T-47D cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with p53 Monoclonal Antibody (4A8) (Product # MA1-7629) at 5 µg/mL in 0.1% BSA and incubated overnight at 4 degree Celsius and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents control cells with no primary antibody to assess background. Panel f represents SK-OV-3 cells as negative control, showing no p53 staining. The images were captured at 60X magnification.



### p53 Antibody (MA1-7629) in ChIP

Enrichment of endogenous p53 protein at specific gene loci using Anti-p53 Antibody: Chromatin Immunoprecipitation (ChIP) was performed using Anti-p53 Mouse Monoclonal Antibody (Product # MA1-7629, 4 µg) on sheared chromatin from 2 million Etoposide-treated A-431 cells using the MAGnify ChIP system kit (Product # 49-2024). Normal Rabbit IgG was used as a negative IP control. The purified DNA was analyzed by qPCR with PCR primer pairs over the CDKN1A and CMBL genes (active) and SAT2 satellite repeats (inactive). Data is presented as fold enrichment of the antibody signal versus the negative control IgG using the comparative CT method.



[View more figures on thermofisher.com](https://www.thermofisher.com)

## 8 References

### Immunohistochemistry (7)

Experimental and toxicologic pathology : official journal of the  
Gesellschaft für Toxikologische Pathologie

#### The effect of vitamin C administration on monosodium glutamate induced liver injury. An experimental study.

"MA1-7629 was used in immunohistochemistry to study the ability of vitamin C to protect against liver injury induced by monosodium glutamate"

Authors: El-Meghawry El-Kenawy A, Osman HE, Daghestani MH

**Species**  
Rat

**Dilution**  
3 ug/ml

**Year**  
2013

Molecular biology reports

#### The effects of PDE5 inhibitory drugs on renal ischemia/reperfusion injury in rats.

"MA1-7629 was used in immunohistochemistry to study the effects of the PDE5 inhibitors Tadalafil and Sildenafil on rat renal ischemia/reperfusion injury"

Authors: Küçük A, Yucel M, Erkasap N, Tosun M, Koken T, Ozkurt M, Erkasap S

**Species**  
Rat

**Dilution**  
Not Cited

**Year**  
2012

[View more IHC references on thermofisher.com](#)

### Western Blot (1)

Neuroscience letters

#### X-irradiation reduces the proliferation of astrocytes by cell cycle arrest.

"MA1-7629 was used in western blot to study the mechanism by which X-ray irradiation attenuates the proliferation of astrocytes"

Authors: Wang Q, Xu Y, Xie MJ, Yu ZY, Qin YY, Wang W, Zhu Z

**Species**  
Rat

**Dilution**  
1:400

**Year**  
2011

### More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.