

# Phospho-p53 (Ser15) Recombinant Rabbit Monoclonal Antibody (14H61L24)

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Rabbit / IgG
Expression system	Expi293
Class	Recombinant Monoclonal
Type	Antibody
Clone	14H61L24
Conjugate	Unconjugated
Immunogen	A peptide corresponding to amino acids 9-19 of P04637.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.09% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2532324

Applications	Tested Dilution	Publications
Western Blot (WB)	0.1-0.5 µg/mL	4 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	0.5-2 µg/mL	-
Flow Cytometry (Flow)	0.5-5 µg/1x10 <sup>6</sup> cells	1 Publication
ChIP assay (ChIP)	1 µL	-
Fluorescence Resonance Energy Transfer (FRET)	Assay-dependent	-

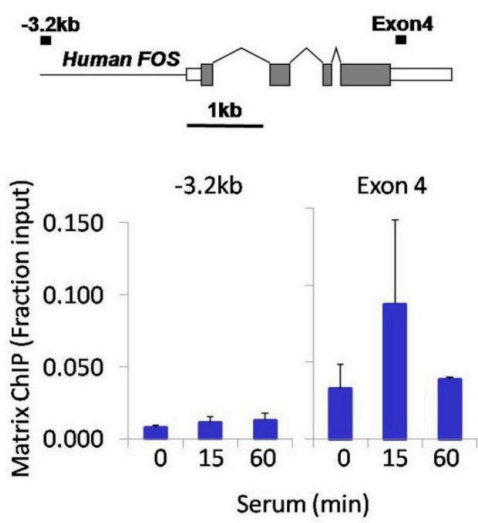
## Product Specific Information

This antibody is predicted to react with chimpanzee, guinea pig, porcine, ovine, bovine, equine, feline, Rhesus monkey and Xenopus based on sequence homology.

Intact IgG appears on a non-reducing gel as ~150 kDa band and upon reduction generating a ~25 kDa light chain band and a ~50 kDa heavy chain.

Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

Product Images For Phospho-p53 (Ser15) Recombinant Rabbit Monoclonal Antibody (14H61L24)

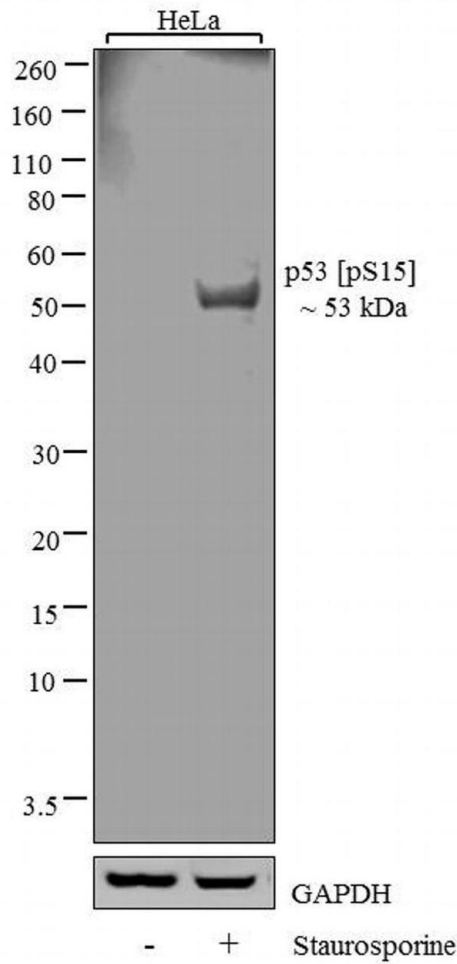


Phospho-p53 (Ser15) Antibody (700439) in ChIP

Chromatin immunoprecipitation analysis of Phospho-p53 (pSer15) was performed using cross-linked chromatin from  $1 \times 10^6$  HCT116 human colon carcinoma cells treated with serum for 0, 15, and 60 minutes. Immunoprecipitation was performed using a multiplex microplate Matrix ChIP assay (see reference for Matrix ChIP protocol: <http://www.ncbi.nlm.nih.gov/pubmed/22098709>) with 1.0  $\mu$ L/100  $\mu$ L well volume of a Phospho-p53 (pSer15) rabbit monoclonal antibody (Product # 700439). Chromatin aliquots from  $\sim 1 \times 10^5$  cells were used per ChIP pull-down. Quantitative PCR data were done in quadruplicate using 1  $\mu$ L of eluted DNA in 2  $\mu$ L SYBR real-time PCR reactions containing primers to amplify -3.2kb upstream of the human FOS gene, or exon-4 of human FOS. PCR calibration curves were generated for each primer pair from a dilution series of sheared total genomic DNA. Quantitation of immunoprecipitated chromatin is presented as signal relative to the total amount of input chromatin. Results represent the mean  $\pm$  SEM for three experiments. A schematic representation of the FOS locus is shown above the data where boxes represent exons (grey boxes = translated regions, white boxes = untranslated regions), the zigzag lines represent introns, and the straight line represents upstream sequence. Regions amplified by FOS primers are represented by black bars. Data courtesy of the Innovators Program.

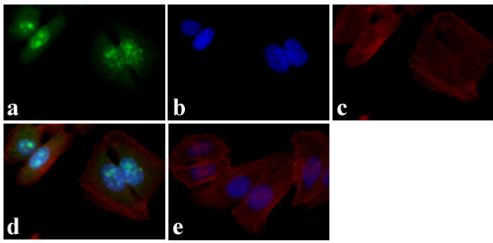
Phospho-p53 (Ser15) Antibody (700439)

Modulation of expression of target protein by cell treatment to demonstrate antibody specificity. Immunofluorescence analysis of Phospho-p53 (Ser15) using Anti-Phospho-p53 (Ser15) Antibody (14H61L24), Recombinant Rabbit Monoclonal (Product # 700439) shows increased expression of Phospho-p53 (Ser15) in HeLa cells treated with Staurosporine. {TM}



Phospho-p53 (Ser15) Antibody (700439) in ICC/IF

Immunofluorescent analysis of p53 (pS15) was done on 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with p53 (pS15) Recombinant Rabbit Monoclonal Antibody (Product # 700439) at 2  $\mu$ g/mL and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488



Goat anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 30 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 Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing nuclear and cytoplasmic localization. Panel e shows no primary antibody control. The images were captured at 20X magnification.

[View more figures on thermofisher.com](#)

## 6 References

### Western Blot (4)

International journal of molecular sciences

#### Molecular Consequences of Depression Treatment: A Potential In Vitro Mechanism for Antidepressants-Induced Reprotoxic Side Effects.

"700439 was used in Western Blot to suggest that antidepressants promote a telomere-focused DNA damage response in germ cell lines, which broadens the established view of antidepressants' and neuroleptic drugs' toxicity and points to the need for further research in this topic with the use of in vivo models and human samples."

Authors: Soek P, Mytych J, Tabcka-onczyńska A, Koziorowski M

Year  
2021

Species  
Mouse

Dilution  
1:1000

eLife

#### A small-molecule ICMT inhibitor delays senescence of Hutchinson-Gilford progeria syndrome cells.

"700439 was used in Western Blot to raise hopes that ICMT inhibitors could be useful for treating children with HGPS."

Authors: Chen X, Yao H, Kashif M, Revêchon G, Eriksson M, Hu J, Wang T, Liu Y, Tüksammel E, Strömlad S, Ahearn IM, Philips MR, Wiel C, Ibrahim MX, Bergo MO

Year  
2021

Species  
Human

Dilution  
1:1000

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

### Immunohistochemistry (Paraffin) (1)

Journal of the American College of Surgeons

#### Automated quantitative analysis of tissue microarray of 443 patients with colorectal adenocarcinoma: low expression of Bcl-2 predicts poor survival.

"700439 was used in immunohistochemistry - paraffin section to investigate Bcl2 expression in colorectal adenocarcinoma"

Authors: Nicholson AD, Guo X, Sullivan CA, Cha CH

Year  
2014

Species  
Human

Dilution  
1:400

### Flow Cytometry (1)

Toxicological sciences : an official journal of the Society of Toxicology

#### Profiling dose-dependent activation of p53-mediated signaling pathways by chemicals with distinct mechanisms of DNA damage.

"Published figure using Phospho-p53 (Ser15) monoclonal antibody (Product # 700439) in Flow Cytometry"

Authors: Clewell RA, Sun B, Adeleye Y, Carmichael P, Efremenko A, McMullen PD, Pendse S, Trask OJ, White A, Andersen ME

Year  
2014

Species  
Human

### 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.