

## Anti-p63/TP63 Antibody

Catalog Number: PA2056

### About TP63

TP63 (Tumor Protein p63), also known as KET, is a protein that in humans is encoded by the TP63 gene. Yang et al. (1998) described the cloning of tumor protein p63, which shows strong homology to the tumor suppressor p53 and the p53-related protein p73. By fluorescence in situ hybridization, Yang et al. (1998) localized the human TP63 gene to chromosome 3q27-q29. Hibi et al. (2000) stated that p53 homologs known variously as p40, p51, p63, and p73L (Trink et al., 1998, Yang et al., 1998, Osada et al., 1998, Senoo et al., 1998) are isoforms of the same gene, which Hibi et al. (2000) referred to as AIS for amplified in squamous cell carcinoma.

### Overview

Product Name	Anti-p63/TP63 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-p63/TP63 Antibody catalog # PA2056. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9H3D4

### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human p63, different from the related rat and mouse sequences by one amino acid.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat</p> <p>Immunocytochemistry , 0.5-1ug/ml, Human, Mouse, Rat</p> <p>Immunocytochemistry/Immunofluorescence, 5ug/ml, Human</p> <p>Flow Cytometry, 1-3ug/1x10<sup>6</sup> cells, Human</p>

## Anti-p63/TP63 Antibody (PA2056) Images

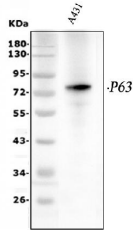


Figure 1. Western blot analysis of p63 using anti-p63 antibody (PA2056).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysates.

red to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-p63 antigen affinity purified polyclonal antibody (Catalog # PA2056) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for p63 at approximately 75 kDa. The expected band size for p63 is at 75 kDa.

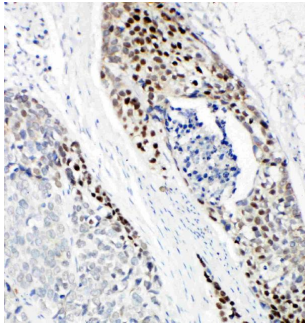


Figure 2. IHC analysis of p63 using anti-p63 antibody (PA2056).

p63 was detected in a paraffin-embedded section of human esophageal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-p63 Antibody (PA2056) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

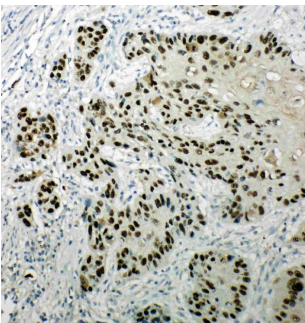
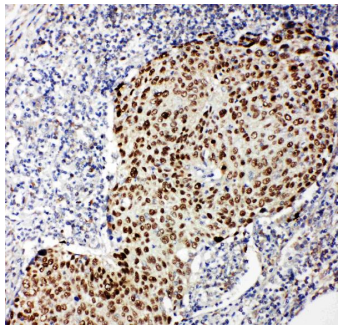


Figure 3. IHC analysis of p63 using anti-p63 antibody (PA2056).

p63 was detected in a paraffin-embedded section of human esophageal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-p63 Antibody (PA2056) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Figure 4. IHC analysis of p63 using anti-p63 antibody (PA2056).

p63 was detected in a paraffin-embedded section of human



lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-p63 Antibody (PA2056) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

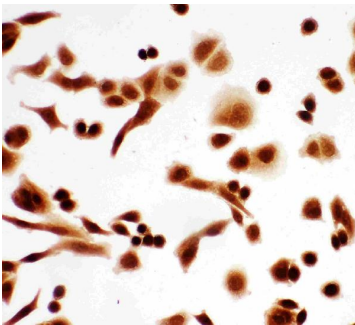


Figure 5. ICC analysis of p63 using anti-p63 antibody (PA2056).  
p63 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 1 ug/ml rabbit anti-p63 Antibody (PA2056) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

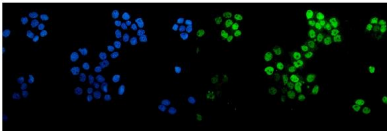


Figure 6. IF analysis of TP63 using anti-TP63 antibody (PA2056).  
TP63 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-TP63 Antibody (PA2056) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

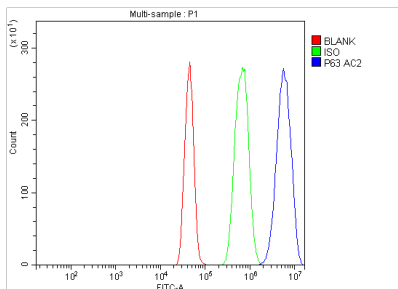


Figure 7. Flow Cytometry analysis of A431 cells using anti-TP63 antibody (PA2056).  
Overlay histogram showing A431 cells stained with PA2056 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TP63 Antibody (PA2056, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

### 3 Publications Citing This Product

1. PubMed ID: 10.1111/jcmm.15160, Ozone therapy promotes the differentiation of basal keratinocytes via increasing Tp63-mediated transcription of KRT10 to improve psoriasis

2. PubMed ID: 32210732, Zhong H, Ren Z, Wang X, Miao K, Ni W, Meng Y, Lu L, Wang C, Liu W, Deng CX, Xu RH, Chen G. Stagerwise keratinocyte differentiation from human embryonic stem cells by defined signal transduction modulators. *Int J Biol Sci.* 2020 Feb 21;16(8):1450-1462. doi:10.7150/ijbs.44414. PMID:32210732; PMCID:PMC7085224.

3. PubMed ID: 31748715, Hu L, Sun Y, Luo J, He X, Ye M, Li G, Zhang Y, Bai J, Zhang D, Chang C. Targeting TR4 nuclear receptor with antagonist bexarotene increases docetaxel sensitivity to better suppress the metastatic castration-resistant prostate cancer progression. *Oncogene.* 2020 Feb;39

Visit [bosterbio.com/anti-p63-antibody-pa2056-boster.html](https://bosterbio.com/anti-p63-antibody-pa2056-boster.html) to see all 3 publications.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-p63/TP63 Antibody