

Anti-p63/TP63 Antibody Picoband®

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

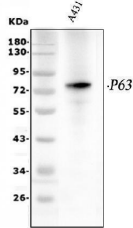
Product Name	Anti-p63/TP63 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-p63/TP63 Antibody catalog # PA2056. Tested in Flow Cytometry, IF, IHC, ICC, ICC/IF, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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

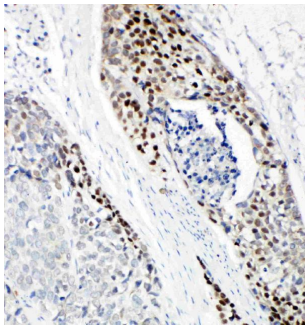
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human p63, different from the related rat and mouse sequences by one amino acid.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated 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	Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Immunocytochemistry , 0.5-1ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10 ⁶ cells, Human

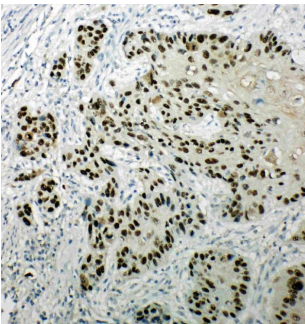
Anti-p63/TP63 Antibody Picoband® (PA2056) Images



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.

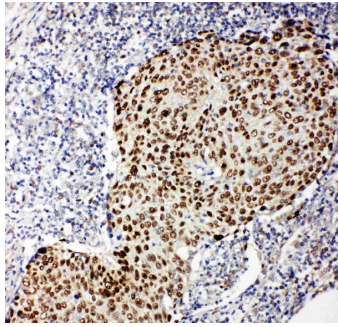


IHC analysis of p63 using anti-p63 antibody (PA2056). p63 was detected in a paraffin-embedded section of human esophageal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. 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.

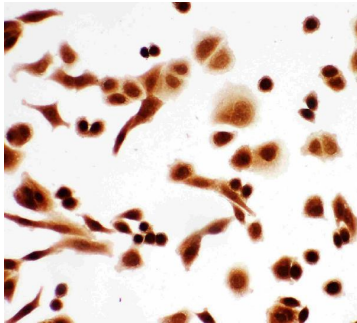


IHC analysis of p63 using anti-p63 antibody (PA2056). p63 was detected in a paraffin-embedded section of human esophageal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. 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.

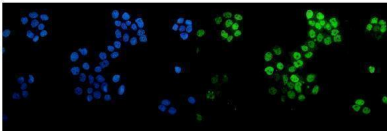
IHC analysis of p63 using anti-p63 antibody (PA2056). p63 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-p63 Antibody (PA2056) overnight at 4°C.



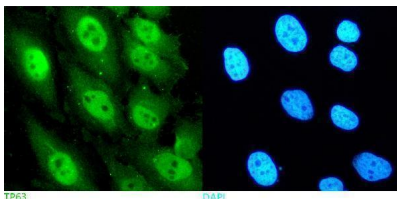
Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



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.

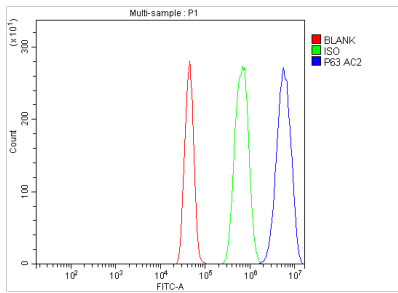


IF analysis of TP63 using anti-TP63 antibody (PA2056). TP63 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit 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.



IF analysis of TP63 using anti-TP63 antibody (PA2056). TP63 was detected in an immunocytochemical section of human HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes and then treated with a membrane permeabilization agent (AR0205) for 5 minutes. The cells were blocked with 10% goat serum. And then incubated with rabbit anti-TP63 Antibody (PA2056) at a dilution of 1:50 overnight at 4°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:500 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.

Flow Cytometry analysis of A431 cells using anti-TP63 antibody (PA2056). Overlay histogram showing A431 cells stained with PA2056 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TP63 Antibody (PA2056, 1ug/1x10⁶ cells) for



30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

3 Publications Citing This Product

1. PubMed ID: 10.1111/jcmm.15160, Ozone therapy promotes the differentiation of basal keratinocytes via increasing Tp63^β 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. Stagewise 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

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Anti-p63/TP63 Antibody

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