abcam

ab32353

Anti-p63 antibody [Y289]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	Y289
Purification technique	Affinity purification Protein A
Specificity	This antibody should detect both isoforms 2,9,10,11 and 12 of p63.
Epitope	ab32353 reacts with an epitope located in the C terminal region of p63.
Concentration	0.521 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human

Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/10000
Notes	**For unpurified use at 1/4000.**

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	**For unpurified use at 1/250 - 1/500.**

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/50
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information TP63

Function	Acts as a sequence specific DNA binding transcriptional activator or repressor. The isoforms contain a varying set of transactivation and auto-regulating transactivation inhibiting domains thus showing an isoform specific activity. Isoform 2 activates RIPK4 transcription. May be required in conjunction with TP73/p73 for initiation of p53/TP53 dependent apoptosis in response to genotoxic insults and the presence of activated oncogenes. Involved in Notch signaling by probably inducing JAG1 and JAG2. Plays a role in the regulation of epithelial morphogenesis. The ratio of DeltaN-type and TA*-type isoforms may govern the maintenance of epithelial stem cell compartments and regulate the initiation of epithelial stratification from the undifferentiated embryonal ectoderm. Required for limb formation from the apical ectodermal ridge. Activates transcription of the p21 promoter.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The p63 protein also known as TP63 or KET is a transcription factor that plays a role in the regulation of cell cycle and apoptosis. With a molecular mass of approximately 77 kDa it expresses predominantly in epithelial tissues such as those in the skin breast and prostate. The expression pattern of p63 makes it a useful marker in developmental biology and cancer diagnosis. Antibodies like '4A4' specifically recognize p63 in various assays including immunohistochemistry.
Biological function summary	P63 participates in the control of epithelial cell differentiation and proliferation. It functions as a member of the p53 family which includes p53 and p73. This family forms an important part of the complex regulatory network that maintains genomic stability. Research using methods like p63 staining in immunohistochemistry highlights its critical role in stratified epithelia. The gene encodes several isoforms with different biological activities impacting processes such as cellular senescence and development.
Pathways	P63 integrates into various signaling pathways that influence cellular growth and adherence. It notably impacts the Notch and Wnt pathways both of which are critical for developmental processes and cancer progression. Through these pathways p63 interacts with proteins like β-catenin and Notch receptors facilitating cross-talk that influences cell fate decisions. Its function relates closely to other transcription factors forming feedback loops that reinforce its regulatory impact.
Associated diseases and disorders	P63 shows strong associations with ectodermal dysplasia and different types of cancers like squamous cell carcinoma. Mutations and altered expressions of p63 contribute to these pathologies by disrupting normal cell proliferation and differentiation. The protein interacts closely with p73 in cancer suggesting a compensatory role when p63 function is compromised. Understanding these connections can guide the development of targeted therapies and improve diagnostic accuracy.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

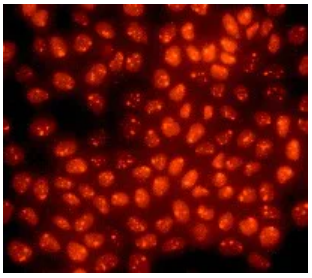
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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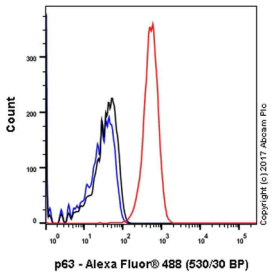
6 product images



Immunocytochemistry/ Immunofluorescence - Anti-p63 antibody [Y289] (ab32353)

P63 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-p63 antibody

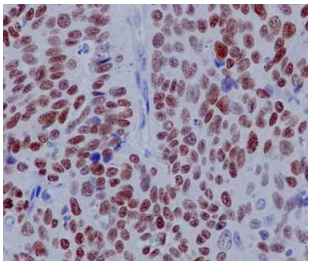
Immunocytochemistry/Immunofluorescence analysis of A431 cells labelling p63 with unpurified ab32353 at 1/250 dilution.



Flow Cytometry (Intracellular) - Anti-p63 antibody [Y289] (ab32353)

P63 Flow Cytometry (Intracellular) staining using rabbit Anti-p63 antibody

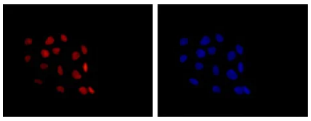
Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling p63 with purified ab32353at 1/500 dilution (1ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p63 antibody [Y289] (ab32353)

P63 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-p63 antibody

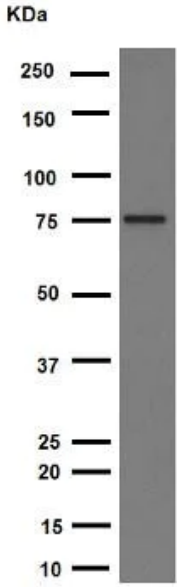
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human hepatocellular skin tissue labelling p63 with purified ab32353 at 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with Hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-p63 antibody [Y289] (ab32353)

P63 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-p63 antibody

Immunocytochemsitry/Immunofluorescence analysis of A431 cells labelling p63 (red) with purified ab32353 at 1/200. Cells were fixed with 4% paraformaldehyde. An Alexa Fluor® 555-conjugated goat anti-rabbit IgG (1/200) was used as the secondary antibody. Counterstained with DAPI (blue).



Western blot - Anti-p63 antibody [Y289] (ab32353)

P63 Western blot staining of A431 cell lysate using rabbit Anti-p63 antibody

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.

All lanes:
Western blot - Anti-p63 antibody [Y289] (ab32353) at 1/4000 dilution

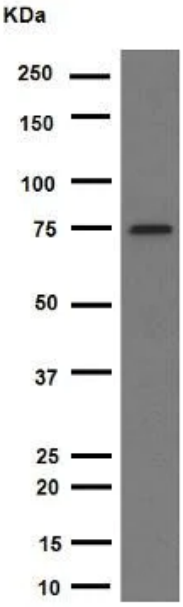
All lanes:
A431 cell lysate at 10 µg

Secondary

All lanes:
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 77 kDa

Observed band size: 73 kDa



Western blot - Anti-p63 antibody [Y289] (ab32353)

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.

All lanes:
Western blot - Anti-p63 antibody [Y289] (ab32353) at 1/10000 dilution

All lanes:
A431 cell lysate at 10 µg

Secondary

All lanes:
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 77 kDa

Observed band size: 73 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.