abcam

ab273142

Anti-p40 - DeltaNp63 antibody [rTP40/3690] - BSA and Azide free

Recombinant

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human TP63. The exact immunogen used to generate this antibody is proprietary information. Database link Q9H3D4
Carrier free	Yes
Clone number	rTP40/3690
Purification technique	Affinity purification Protein A
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1-2 µg/mL
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	Blue Ice
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

ab273142 is the carrier-free version of ab273135.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Supplementary info

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

Activity summary	The biological target p40 also known as ΔNp63 is an essential protein isoform of the p63 gene. This target weighs approximately 40 kDa and is expressed predominantly in epithelial tissues such as the basal layer of the skin and select organs. Due to its significant role in development and differentiation researchers often study p40 in the context of specific cancers using techniques like p40 immunostaining p40 IHC and p40 marker assays including the anti-p40 stain.
Biological function summary	The p40 protein acts as a transcription factor regulating epithelial stem cell maintenance and differentiation. It is an integral component of the tetrameric complex of the p63 protein family where it influences the transcription of genes involved in cell cycle control and apoptotic pathways. The ΔNp63 variant lacking the N-terminal transactivation domain plays an important role in blocking premature senescence contributing to cell proliferative capacity.
Pathways	P40 is involved in the Notch signaling and the PI3K/AKT signaling pathways. In Notch signaling p40 interacts alongside related proteins like bcl-2 or B28 impacting the regulation of cell fate and differentiation. The PI3K/AKT pathway involves p40 in processes essential for cell survival and proliferation often overlapping with proteins such as AKT and mTOR.
Associated diseases and disorders	P40 significantly links to various forms of cancer especially squamous cell carcinoma and lung adenocarcinoma. Aberrant expression of ΔNp63 and its disruption in pathways contribute to the pathogenesis of these cancers. In squamous cell carcinoma p40 expression serves as an important biomarker distinguishing it from other tumor types connecting with proteins like Bcl-2 which are important in managing apoptotic resistance in cancerous cells.

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

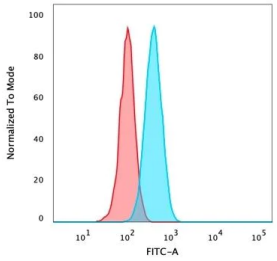
We do not recommend this combination. It is not covered by our product promise.

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.

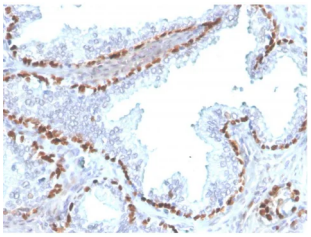
3 product images



Flow Cytometry - Anti-p40 - DeltaNp63 antibody [rTP40/3690] - BSA and Azide free (ab273142)

P40 - DeltaNp63 Flow Cytometry staining using mouse Anti-p40 - DeltaNp63 antibody

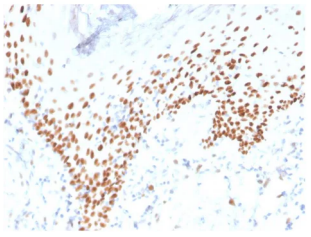
Flow cytometry analysis of PFA-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells using ab273135 followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab273135).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p40 - DeltaNp63 antibody [rTP40/3690] - BSA and Azide free (ab273142)

P40 - DeltaNp63 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-p40 - DeltaNp63 antibody

Paraffin-embedded human kidney tissue stained for p40 (deltaNp63) using ab273135 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab273135).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p40 - DeltaNp63 antibody [rTP40/3690] - BSA and Azide free (ab273142)

Paraffin-embedded human skin tissue stained for p40 (deltaNp63) using ab273135 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab273135).

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