abcam

ab246728

Alexa Fluor® 647 Anti-p63 antibody [EPR5701]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 647
Excitation/Emission	Ex: 650nm, Em: 665nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR5701
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human

Dilution info	1/6250
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

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, Stable for 12 months at -20°C, Store in the dark

Notes

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.

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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.

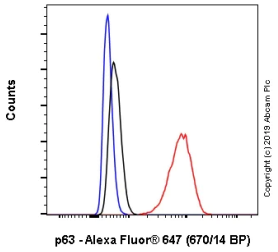
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1 product image



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-p63 antibody [EPR5701] (ab246728)

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

Overlay histogram showing A431 cells stained with ab246728 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal Goat serum to block non-specific protein-protein interactions followed by the antibody (ab246728) (1x 10^6 cells in 100 µl at 0.08 µg/ml (1/6250 dilution)) for 30 min at 22°C.
Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor® 647 (ab199093) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 40 mW Red laser (640nm) and 670/14 bandpass filter.

This antibody gave a positive signal in A431 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.

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