abcam

Product datasheet

Anti-p63 antibody [EPR5701] - BSA and Azide free ab214790

重组 RabMAb

4 References 9 图像

概述

产品名称	Anti-p63抗体[EPR5701] - BSA and Azide free
描述	兔单克隆抗体[EPR5701] to p63 - BSA and Azide free
宿主	Rabbit
特异性	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
经测试应用	**适用于:** Flow Cyt (Intra), mIHC, ICC/IF, WB, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Rat bladder and skin, Mouse bladder, skin and thymus tissue lysates; HaCaT, PC-12, and A431 cell lysates; IHC-P: Human breast tissue; ICC/IF: A431 and primary corneal limbal cells; Flow Cyt (intra): A431 cells. mIHC: Human prostate gland tissues.
常规说明	ab214790 is the carrier-free version of **ab124762**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. 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. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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 production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.20 Constituent: PBS
无载体	**是**
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR5701
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab214790于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration.
mIHC		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 50-75 kDa (predicted molecular weight: 77 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

靶标

功能 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. 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.

组织特异性

Widely expressed, notably in heart, kidney, placenta, prostate, skeletal muscle, testis and thymus, although the precise isoform varies according to tissue type. Progenitor cell layers of skin, breast, eye and prostate express high levels of DeltaN-type isoforms. Isoform 10 is predominantly expressed in skin squamous cell carcinomas, but not in normal skin tissues.

疾病相关

Defects in TP63 are the cause of acro-dermato-ungual-lacrimal-tooth syndrome (ADULT syndrome) [MIM:103285]; a form of ectodermal dysplasia. Ectodermal dysplasias (EDs) constitute a heterogeneous group of developmental disorders affecting tissues of ectodermal origin. EDs are characterized by abnormal development of two or more ectodermal structures such as hair, teeth, nails and sweat glands, with or without any additional clinical sign. Each combination of clinical features represents a different type of ectodermal dysplasia. ADULT syndrome involves ectrodactyly, syndactyly, finger- and toenail dysplasia, hypoplastic breasts and nipples, intensive freckling, lacrimal duct atresia, frontal alopecia, primary hypodontia, and loss of permanent teeth. ADULT differs significantly from EEC3 syndrome by the absence of facial clefting.
Defects in TP63 are the cause of ankyloblepharon-ectodermal defects-cleft lip/palate (AEC) [MIM:106260]. AEC is an autosomal dominant condition characterized by congenital ectodermal dysplasia with coarse, wiry, sparse hair, dystrophic nails, slight hypohidrosis, scalp infections, ankyloblepharon filiform adnatum, maxillary hypoplasia, hypodontia and cleft lip/palate.
Defects in TP63 are the cause of ectrodactyly-ectodermal dysplasia-cleft lip/palate syndrome type 3 (EEC3) [MIM:604292]. EEC3 is an autosomal dominant syndrome characterized by ectrodactyly of hands and feet, ectodermal dysplasia and facial clefting.
Defects in TP63 are the cause of split-hand/foot malformation type 4 (SHFM4) [MIM:605289]. Split-hand/split-foot malformation is a limb malformation involving the central rays of the autopod and presenting with syndactyly, median clefts of the hands and feet, and aplasia and/or hypoplasia of the phalanges, metacarpals, and metatarsals. There is restricted overlap between the mutational spectra of EEC3 and SHFM4.
Defects in TP63 are the cause of limb-mammary syndrome (LMS) [MIM:603543]. LMS is characterized by ectrodactyly, cleft palate and mammary-gland abnormalities.
Note=Defects in TP63 are a cause of cervical, colon, head and neck, lung and ovarian cancers.
Defects in TP63 are a cause of ectodermal dysplasia Rapp-Hodgkin type (EDRH) [MIM:129400]; also called Rapp-Hodgkin syndrome or anhidrotic ectodermal dysplasia with cleft lip/palate. Ectodermal dysplasia defines a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. EDRH is characterized by the combination of anhidrotic ectodermal dysplasia, cleft lip, and cleft palate. The clinical syndrome is comprised of a characteristic facies (narrow nose and small mouth), wiry, slow-growing, and uncombable hair, sparse eyelashes and eyebrows, obstructed lacrimal puncta/epiphora, bilateral stenosis of external auditory canals, microsomia, hypodontia, cone-shaped incisors, enamel hypoplasia, dystrophic nails, and cleft lip/cleft palate.
Defects in TP63 are the cause of non-syndromic orofacial cleft type 8 (OFC8) [MIM:129400]. Non-syndromic orofacial cleft is a common birth defect consisting of cleft lips with or without cleft palate. Cleft lips are associated with cleft palate in two-third of cases. A cleft lip can occur on one or both sides and range in severity from a simple notch in the upper lip to a complete opening in the lip extending into the floor of the nostril and involving the upper gum.

序列相似性

Belongs to the p53 family.
Contains 1 SAM (sterile alpha motif) domain.

结构域

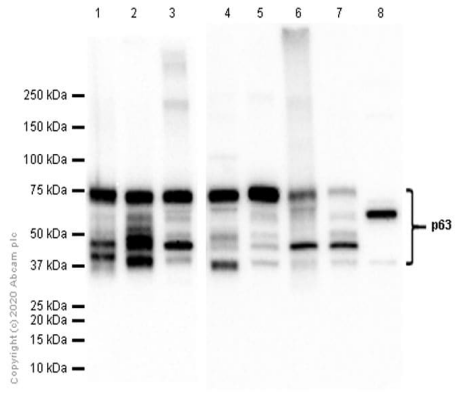
The transactivation inhibitory domain (TID) can interact with, and inhibit the activity of the N-terminal transcriptional activation domain of TA*-type isoforms.

翻译后修饰

May be sumoylated.

	Ubiquitinated. Polyubiquitination involves WWP1 and leads to proteasomal degradation of this protein.
细胞定位	Nucleus.

图片



Western blot - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

All lanes : Anti-p63 antibody [EPR5701] (**ab124762**) at 1/1000 dilution (Purified)

Lane 1 : HaCaT (Human skin keratinocyte) whole cell lysates
Lane 2 : A431 (Human epidermoid carcinoma epithelial cell) whole cell lysates
Lane 3 : Mouse skin lysates
Lane 4 : Mouse thymus lysates
Lane 5 : Mouse bladder lysates
Lane 6 : Rat skin lysates
Lane 7 : Rat bladder lysates
Lane 8 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates

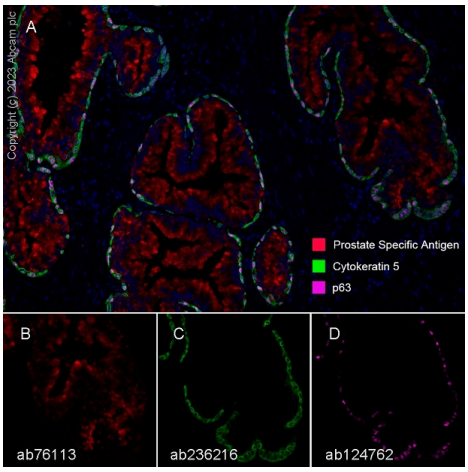
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 77 kDa
Observed band size: 37-75 kDa

The bands observed are consistent with what have been described in PMID 30649915 as isoforms of p63.

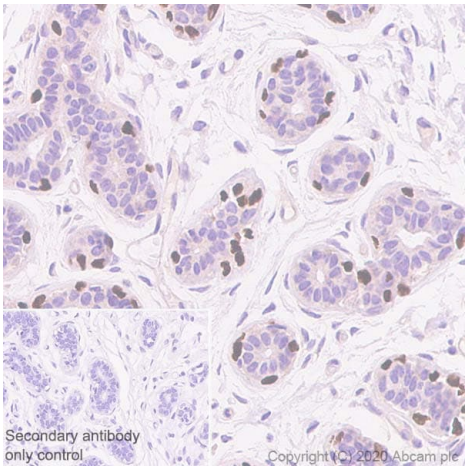
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab124762**).



Multiplex immunohistochemistry - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

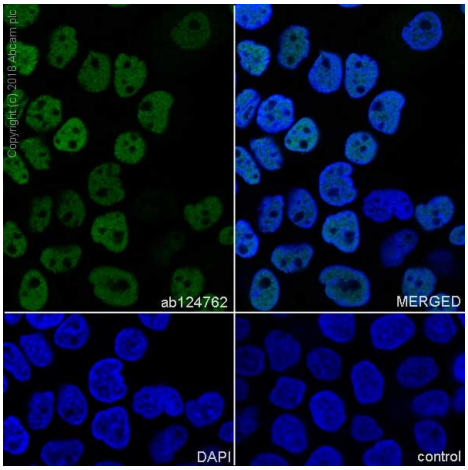
Fluorescence multiplex immunohistochemical analysis of human prostate gland tissue (formalin/PFA-fixed paraffin-embedded section). Panel A: merged staining of anti-p63 (**ab124762**, magenta; Opal™690), anti-Cytokeratin 5 (**ab236216**, green; Opal™520) and anti-Prostate Specific Antigen (**ab76113**, red; Opal™570) on human prostate gland tissue. Panel B: anti-Prostate Specific Antigen stained on luminal cells. Panel C: anti-Cytokeratin 5 stained on cytoplasm of basal cells. Panel D: anti-p63 stained on nucleus of basal cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of **ab124762** (1/5000), **ab236216** (1/400), and **ab76113** (1/2000) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) was used for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab124762**).



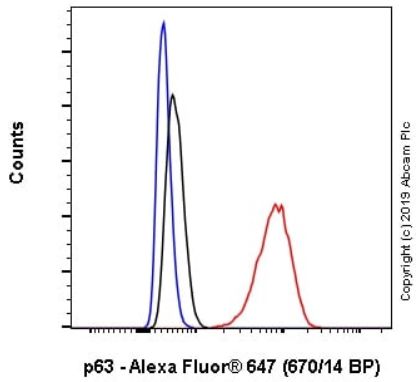
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast tissue sections labeling p63 with Purified **ab124762** at 1/5000 dilution (0.16 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab124762**).



Immunocytochemistry/ Immunofluorescence - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

Immunocytochemistry/ Immunofluorescence analysis of A431(Human epidermoid carcinoma epithelial cell) cells labeling p63 with Purified **ab124762** at 1/200 dilution (4 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab124762**).



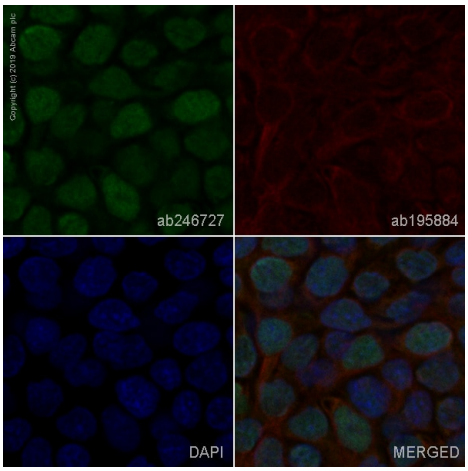
Flow Cytometry (Intracellular) - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

Clone EPR5701 (ab214790) has been successfully conjugated by Abcam. This image was generated using Anti-p63 antibody [EPR5701] (Alexa Fluor® 647). Please refer to **ab246728** for protocol details.

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 100µl at 0.08µg/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.



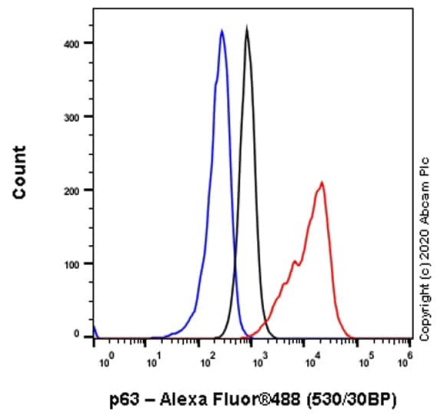
Immunocytochemistry/ Immunofluorescence - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

Clone EPR5701 (ab214790) has been successfully conjugated by Abcam. This image was generated using Anti-p63 antibody [EPR5701] (Alexa Fluor® 488). Please refer to **ab246727** for protocol details.

ab246727 staining p63 in A431 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with **ab246727** at 1/100 dilution (shown in green) and **ab195884**, Rat monoclonal to Tubulin (Alexa Fluor® 647), at 1/250 dilution (shown in red). Nuclear DNA was labeled with DAPI (shown in blue).

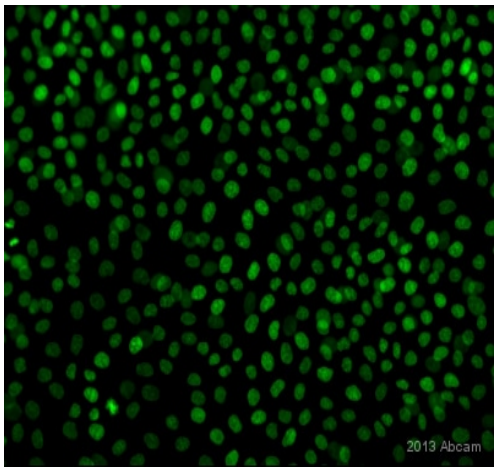
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in A431 cells fixed with 4% formaldehyde (10 min).



Flow Cytometry (Intracellular) - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

Intracellular Flow Cytometry analysis of A431 (Human epidermoid carcinoma epithelial cell) cells labeling p63 with Purified **ab124762** at 1/80 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab124762**).

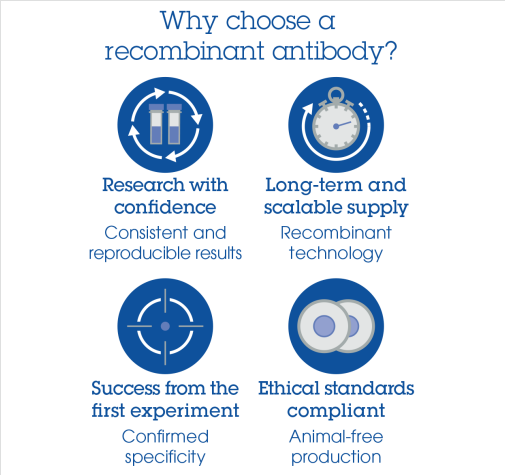


Immunocytochemistry/ Immunofluorescence - Anti-p63 antibody [EPR5701] - BSA and Azide free (ab214790)

This image is courtesy of an Abreview submitted by Manuel Chacon.

Unpurified **ab124762** staining p63 in Human corneal limbal epithelial cells (primary culture) by ICC/IF (immunocytochemistry/immunofluorescence). Cells were fixed with methanol and permeabilized with 0.3% Triton X-100 for 5 minutes. Samples were incubated with primary antibody (1/100 in PBS + 10% Goat serum) for 18 hours at 4°C. An Alexa Fluor® 488-conjugated Goat anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab124762**).



Anti-p63 antibody [EPR5701] - BSA and Azide free

(ab214790)

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