abcam

Product datasheet

Anti-p73 antibody [EPR19884] - BSA and Azide free ab251550

KO VALIDATED Recombinant RabMAb

9 Images

Overview

Product name	Anti-p73 antibody [EPR19884] - BSA and Azide free
Description	Rabbit monoclonal [EPR19884] to p73 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ChIP, IP, IHC-P, WB
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
General notes	ab251550 is the carrier-free version of **ab215038**. 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**.

Properties

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Clonality	Monoclonal
Clone number	EPR19884
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251550 in the following tested applications.

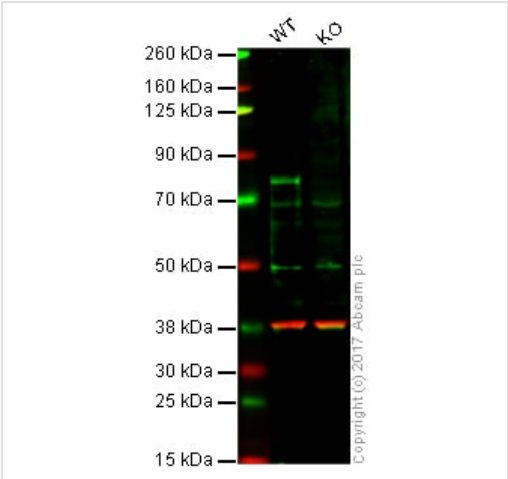
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ChIP		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 70, 80 kDa (predicted molecular weight: 70 kDa).

Target

Function	Participates in the apoptotic response to DNA damage. Isoforms containing the transactivation domain are pro-apoptotic, isoforms lacking the domain are anti-apoptotic and block the function of p53 and transactivating p73 isoforms. May be a tumor suppressor protein.
Tissue specificity	Expressed in striatal neurons of patients with Huntington disease (at protein level). Brain, kidney, placenta, colon, heart, liver, spleen, skeletal muscle, prostate, thymus and pancreas. Highly expressed in fetal tissue.
Sequence similarities	Belongs to the p53 family. Contains 1 SAM (sterile alpha motif) domain.
Domain	Possesses an acidic transactivation domain, a central DNA binding domain and a C-terminal oligomerization domain that binds to the ABL tyrosine kinase SH3 domain. The WW-binding motif mediates interaction with WWOX.
Post-translational modifications	Isoform alpha (but not isoform beta) is sumoylated on Lys-627, which potentiates proteasomal degradation but does not affect transcriptional activity. Higher levels of phosphorylation seen in the brain from patients with Huntington disease. Ubiquitinated; leading to its degradation by the proteasome.
Cellular localization	Nucleus. Accumulates in the nucleus in response to DNA damage.

Images



Western blot - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

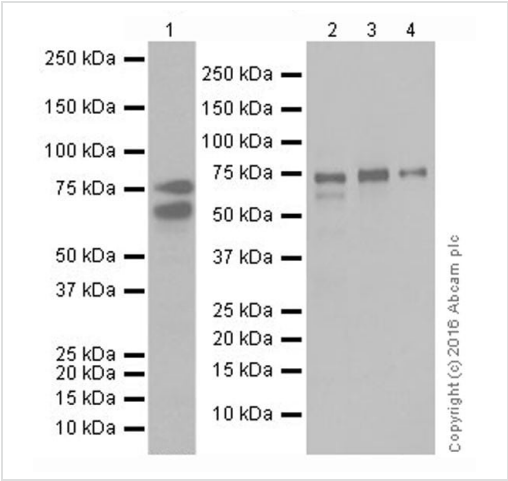
This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

Lane 2: p73 knockout HAP1 whole cell lysate (20 µg)

Lanes 1 - 2: Merged signal (red and green). Green - **ab215038** observed at 75 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab215038 was shown to recognize p73 in wild-type HAP1 cells as signal was lost at the expected MW in p73 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and p73 knockout samples were subjected to SDS-PAGE. **ab215038** and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/50 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

All lanes : Anti-p73 antibody [EPR19884] - ChIP Grade (**ab215038**) at 1/1000 dilution

Lane 1 : HT-1376 (Human urinary bladder carcinoma cell line) whole cell lysate
Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 3 : 293 (Human epithelial cell line from embryonic kidney) whole cell lysate
Lane 4 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

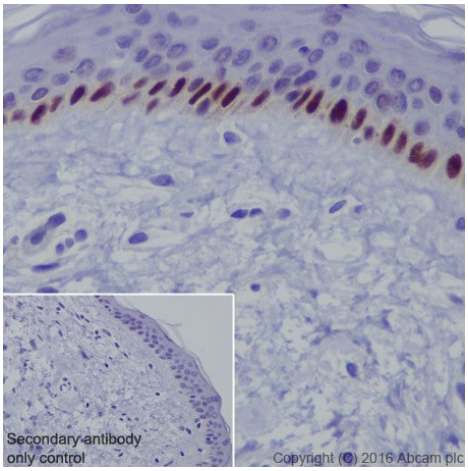
Predicted band size: 70 kDa
Observed band size: 70,80 kDa

This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 3 minutes; Lanes 2-4: 30 seconds.

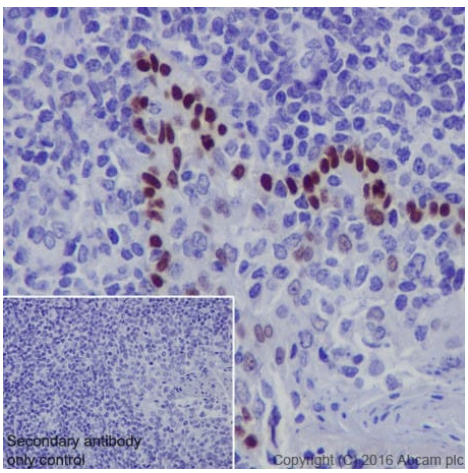
The expression profile/molecular weight observed is consistent with what has been described in the literature (PMID: 11101847).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

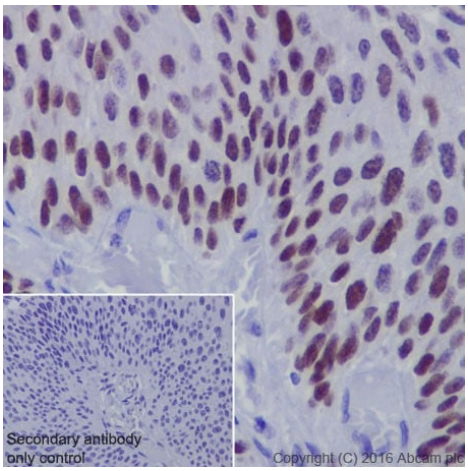
This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling p73 with **ab215038** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on basal and parabasal layers of squamous epithelium of human skin is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



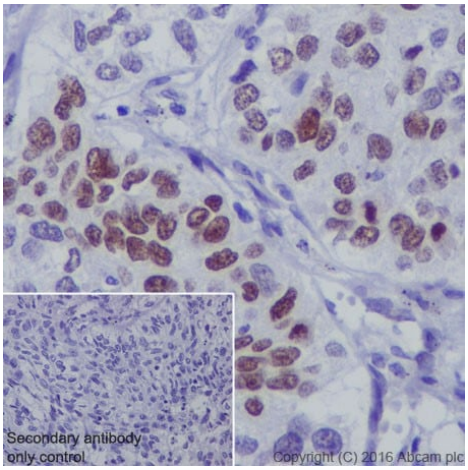
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling p73 with **ab215038** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on basal and parabasal layers of squamous epithelium of human tonsil is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



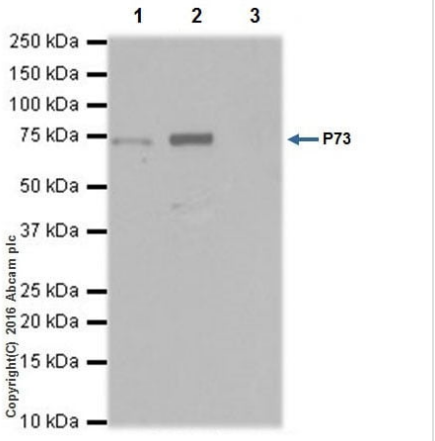
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded human bladder cancer tissue labeling p73 with **ab215038** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on human bladder cancer is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded human lung squamous carcinoma tissue labeling p73 with **ab215038** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on human lung squamous carcinoma is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.

p73 was immunoprecipitated from 0.35 mg of HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate with **ab215038** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab215038** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1,000 dilution.

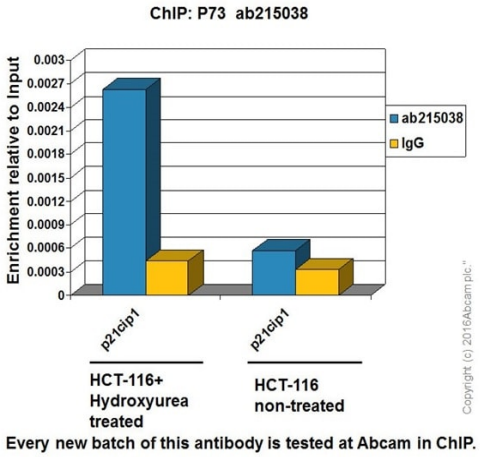
Lane 1: HEK-293 whole cell lysate 10 µg (Input).

Lane 2: **ab215038** IP in HEK-293 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab215038** in HEK-293 whole cell lysate.

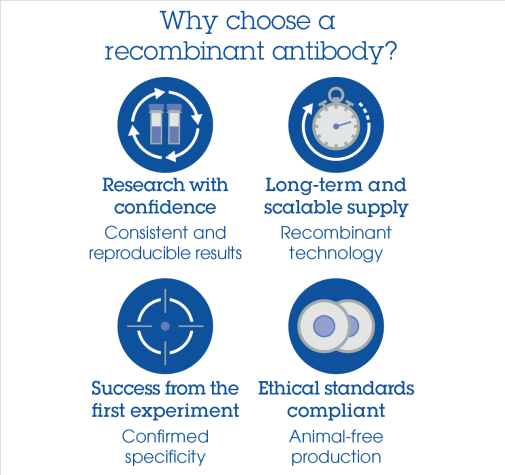
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 1 second.



ChIP - Anti-p73 antibody [EPR19884] - BSA and Azide free (ab251550)

This data was developed using **ab215038**, the same antibody clone in a different buffer formulation.Chromatin was prepared from HCT 116 (Human colorectal carcinoma cell line) cells treated with 1mM Hydroxyurea for 16h and non-treated according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 25µg of chromatin, 2µg of **ab215038** (blue), and 20µl of Anti rabbit IgG sepharose beads. 2µg of rabbit normal IgG was added to the beads control (yellow). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).



Anti-p73 antibody [EPR19884] - BSA and Azide free

(ab251550)

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