# abcam

### Product datasheet

# Anti-Cytochrome b245 Light Chain/p22-phox antibody ab75941

★★★★★ <u>5 Abreviews</u> <u>18 References</u> 3 Images

#### Overview

**Product name** Anti-Cytochrome b245 Light Chain/p22-phox antibody

**Description** Rabbit polyclonal to Cytochrome b245 Light Chain/p22-phox

Host species Rabbit

**Specificity** Replenishment batches of ab75941 are tested in WB. Previous batches were additionally

validated in IHC-P. This application is still expected to work and is covered by our Abpromise guarantee. Please note, previous lots of this product were also guaranteed in ICC/IF. We are having trouble reproducing new lots suitable for ICC/IF. Therefore this application has been

removed and it no longer guaranteed.

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat, Cow, Pig

Immunogen Synthetic peptide corresponding to Cytochrome b245 Light Chain/p22-phox aa 100 to the C-

terminus conjugated to keyhole limpet haemocyanin.

(Peptide available as ab86646)

Positive control

This antibody gave a positive signal in the following lysates: HepG2 Whole Cell, Mouse Pancreas

Tissue, Mouse Spleen Tissue. This antibody gave a positive result in IHC in the following FFPE

tissue: Human normal lung.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

 $80^{\circ}\text{C}\,.$  Avoid freeze / thaw cycle.

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Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

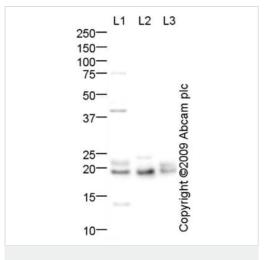
## **Applications**

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab75941 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
WB	****(3)	Use a concentration of 1 µg/ml. Detects a band of approximately 19, 21 kDa (predicted molecular weight: 21 kDa).
IHC-P		Use a concentration of 1 µg/ml.

Target	
Relevance	Cytochrome b245 Light Chain/p22phox is a critical component of the membrane-bound oxidase complex that generates superoxide. It complexes with NOX3 to form a functional NADPH oxidase.
Cellular localization	Cell Membrane
Images	



Western blot - Anti-Cytochrome b245 Light Chain/p22-phox antibody (ab75941) **All lanes :** Anti-Cytochrome b245 Light Chain/p22-phox antibody (ab75941) at 1 μg/ml

**Lane 1 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 2 : Pancreas (Mouse) Tissue Lysate
Lane 3 : Spleen (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

# Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

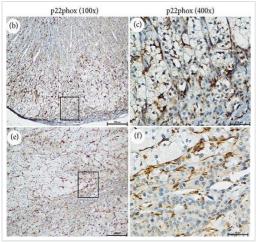
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 21 kDa **Observed band size:** 21 kDa

**Additional bands at:** 19 kDa (possible cleavage fragment), 40 kDa. We are unsure as to the identity of these extra bands.

We hypothesize that the 21 kDa band represents the pro-form of Cytochrome b245 Light Chain/p22-phox, and the 19 kDa band represents the mature form.



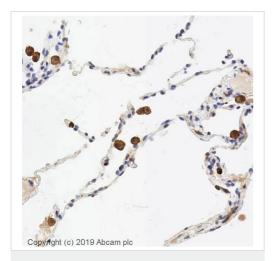
Immunohistochemistry (Formalin/PFA-fixed paraffin-

Geng X et al., Int J Endocrinol 2016, Fig 3., doi: 10.1155/2016/2395634 Reproduced under the Creative Commons license https://creativecommons.org/licenses/by/4.0/

embedded sections) - Anti-Cytochrome b245 Light

Chain/p22-phox antibody (ab75941)

Immunohistochemical analyses of p22phox using ab75941 (1/200) in normal adrenocortical tissue (b-c) and adrenal aldosterone-producing adenoma, (e-f) p22phox presents a gradient of expression in the entire adrenal cortex (100x), and its localization was restricted to the cell membrane (400x). Sections were incubated with primary antibody at 4°C overnight and with a HRPconjugated secondary antibody for 30 minutes at 37°C.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome b245 Light Chain/p22-phox antibody (ab75941)

IHC image of Cytochrome b245 Light Chain/p22-phox staining in a section of formalin-fixed paraffin-embedded normal human lung\* performed on a Leica BOND<sup>TM</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab75941, 1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

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