

Product datasheet

Anti-NADPH oxidase 4 antibody ab79971

★★★★★ [1 Abreviews](#) [5 References](#) [3 图像](#)

概述

产品名称	Anti-NADPH oxidase 4抗体
描述	兔多克隆抗体to NADPH oxidase 4
宿主	Rabbit
经测试应用	适用于: WB, ICC/IF, IHC-P
种属反应性	与反应: Human 预测可用于: Sheep, Cow, Orangutan 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as ab104391 , ab112414)
阳性对照	This antibody gave a positive signal in the following whole cell lysates: HeLa; HEK293; HepG2. This antibody gave a positive result in IHC in the following FFPE tissue: Human normal kidney. This antibody gave a positive result when used in the following formaldehyde fixed cell lines: A431
常规说明	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

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	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.	

纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab79971于以下的经测试应用

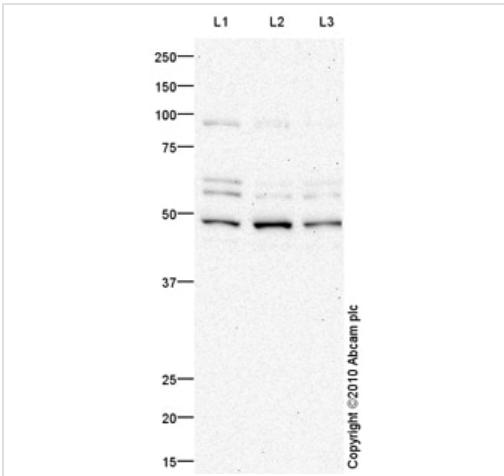
“应用说明”部分下显示的仅为推荐的起始稀释度；实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 67 kDa (predicted molecular weight: 67 kDa). Can be blocked with Recombinant Human NADPH oxidase 4 protein (ab112414) .
ICC/IF	★★★★★ (1)	Use a concentration of 5 µg/ml.
IHC-P		Use a concentration of 5 µg/ml.

靶标

功能	Constitutive NADPH oxidase which generates superoxide intracellularly upon formation of a complex with CYBA/p22phox. Regulates signaling cascades probably through phosphatases inhibition. May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity. May regulate insulin signaling cascade. May play a role in apoptosis, bone resorption and lipopolysaccharide-mediated activation of NFkB. May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation. Isoform 3 is not functional. Isoform 4 displays an increased activity. Isoform 5 and isoform 6 display reduced activity.
组织特异性	Expressed by distal tubular cells in kidney cortex and in endothelial cells (at protein level). Widely expressed. Strongly expressed in kidney and to a lower extent in heart, adipocytes, hepatoma, endothelial cells, skeletal muscle, brain, several brain tumor cell lines and airway epithelial cells.
序列相似性	Contains 1 FAD-binding FR-type domain. Contains 1 ferric oxidoreductase domain.
发展阶段	Expressed in fetal kidney and fetal liver.
翻译后修饰	Isoform 3 and isoform 4 are N-glycosylated. Isoform 4 glycosylation is required for its proper function.
细胞定位	Endoplasmic reticulum membrane. Cell membrane. Cell junction > focal adhesion. Nucleus. May localize to plasma membrane and focal adhesions. According to PubMed:15927447, may also localize to the nucleus.

图片



All lanes : Anti-NADPH oxidase 4 antibody (ab79971) at 1 µg/ml

Lane 1 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 3 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Developed using the ECL technique.

Performed under reducing conditions.

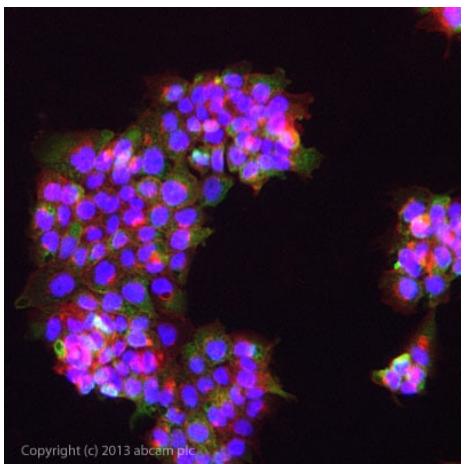
Predicted band size: 67 kDa

Observed band size: 67 kDa

Additional bands at: 48 kDa, 62 kDa (possible isoform), 94 kDa.

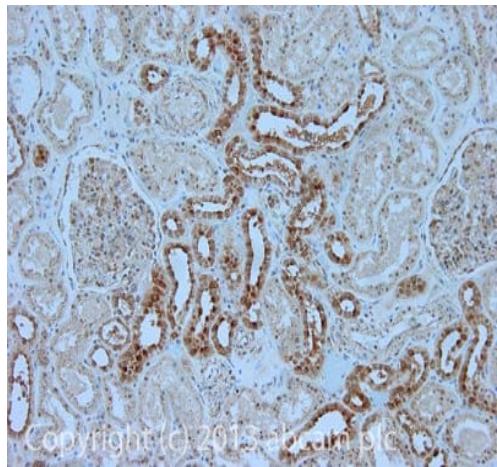
We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes



ICC/IF image of ab79971 stained A431 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab79971 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (**ab96899**) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Immunocytochemistry/ Immunofluorescence - Anti-NADPH oxidase 4 antibody (ab79971)



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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NADPH oxidase 4 antibody (ab79971)

IHC image of NADPH oxidase 4 staining in Human normal kidney formalin fixed paraffin embedded tissue section, performed on a Leica BondTM 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 20 mins. The section was then incubated with ab79971, 5µg/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.

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