


## Product datasheet

# Anti-NADPH oxidase 4 antibody ab79971

★★★★★ 1 Abreviews 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 derived from within residues 100 - 200 of Human NOX4.参阅Abcam的专有抗原政策
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

### 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	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

### 应用

Our [Abpromise guarantee](#) covers the use of **ab79971** in the following tested applications.

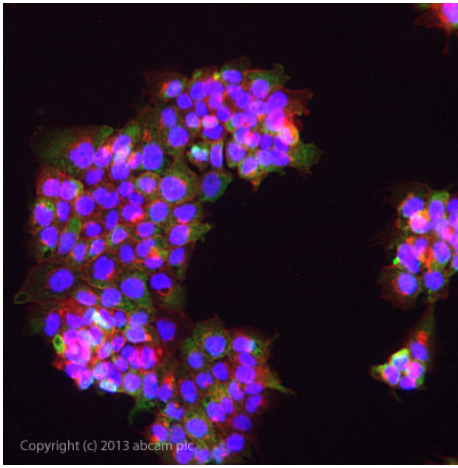
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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).
ICC/IF	★★★★★	Use a concentration of 5 µg/ml.
IHC-P		Use a concentration of 5 µg/ml.

## 靶标

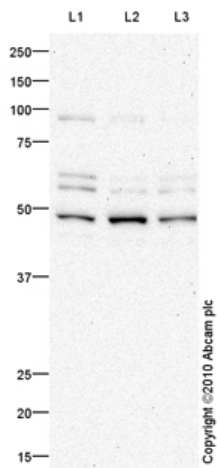
功能	Constitutive NADPH oxidase which generates superoxide intracellularly upon formation of a complex with CYBA/p22phox. Regulates signaling cascades probably through phosphatases inhibition. May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity. May regulate insulin signaling cascade. May play a role in apoptosis, bone resorption and lipopolysaccharide-mediated activation of NFκB. 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



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

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.



Western blot - Anti-NADPH oxidase 4 antibody (ab79971)

**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.

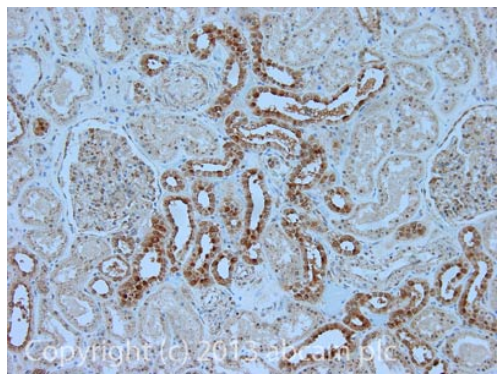
Performed under reducing conditions.

**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



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 Bond™ 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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