DATASHEET

p47 phox Rabbit Polyclonal Antibody

CAT. NO. APA09976

KEY FEATURES

Target	p47 phox	**Source / Host**	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Dog, Monkey, Sheep	**Clonality**	Polyclonal
Applications	WB, IHC, IF/ICC	**Conjugation**	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	**Storage**	at-20°C

BACKGROUND

Subunit of the phagocyte NADPH oxidase complex that mediates the transfer of electrons from cytosolic NADPH to O2 to produce the superoxide anion (O2(-))) . In the activated complex, electrons are first transferred from NADPH to flavin adenine dinucleotide (FAD) and subsequently transferred via two heme molecules to molecular oxygen, producing superoxide through an outer-sphere reaction . Activation of the NADPH oxidase complex is initiated by the assembly of cytosolic subunits of the NADPH oxidase complex with the core NADPH oxidase complex to form a complex at the plasma membrane or phagosomal membrane . This activation process is initiated by phosphorylation dependent binding of the cytosolic NCF1/p47-phox subunit to the C-terminus of CYBA/p22-phox .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:100 - 1:500

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to p47 phox
Specificity	Recognizes endogenous levels of p47 phox protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human p47 phox. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 44 kD; Observed: 47 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	NOXO2; SH3PXD1A; Neutrophil cytosol factor 1; NCF-1; 47 kDa autosomal chronic granulomatous disease protein; 47 kDa neutrophil oxidase factor; NCF-47K; Neutrophil NADPH oxidase factor 1; Nox organizer 2; Nox-organizing protein 2; SH3 and PX domain-containing protein 1A; p47-phox
Gene Symbol	NCF1
Entrez Gene	653361(Human); 17969(Mouse)
SwissProt	P14598(Human); Q09014(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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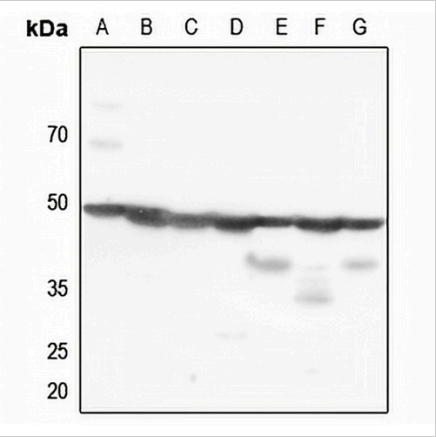
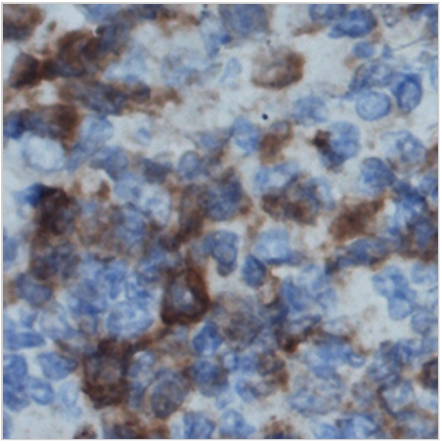
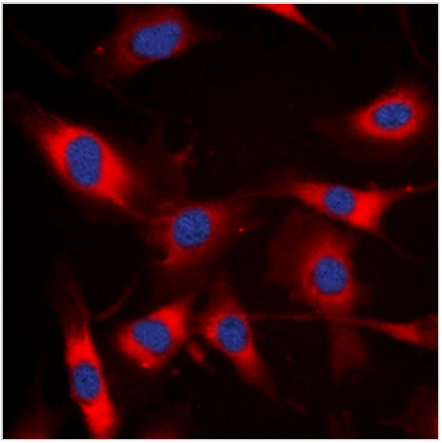
DATA



Western blot analysis of p47 phox expression in HEK293T (A), Hela (B), mouse lung (C), mouse liver (D), rat lung (E), rat liver (F), rat spleen (G) whole cell lysates. (Predicted band size: 44 kD; Observed band size: 47 kD)



Immunohistochemical analysis of p47 phox staining in human lymphoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody 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.



Immunofluorescent analysis of p47 phox staining in Raji cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.