

p47 phox Antibody (Ab-304)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50019

Specification

p47 phox Antibody (Ab-304) - Product Information

Application	WB, IF
Primary Accession	P14598
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45,31 KDa
Antigen Region	295-330

p47 phox Antibody (Ab-304) - Additional Information

Gene ID 653361

Other Names

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, NCF1, NOXO2, SH3PXD1A

Dilution

WB~~ 1:250-1:1000

IF~~1:100

Format

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

p47 phox Antibody (Ab-304) - Protein Information

Name NCF1 ([HGNC:7660](#))

Synonyms NOXO2, SH3PXD1A

Function

Subunit of the phagocyte NADPH oxidase complex that mediates the transfer of electrons from cytosolic NADPH to O₂ to produce the superoxide anion (O₂⁻) (PubMed:2547247, PubMed:2550933, PubMed:38355798). 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 (PubMed:38355798). 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 (PubMed:38355798). This activation process is initiated by phosphorylation dependent binding of the cytosolic NCF1/p47-phox subunit to the C-terminus of CYBA/p22-phox (PubMed:12732142, PubMed:19801500).

Cellular Location

Cytoplasm, cytosol. Membrane; Peripheral membrane protein; Cytoplasmic side

Tissue Location

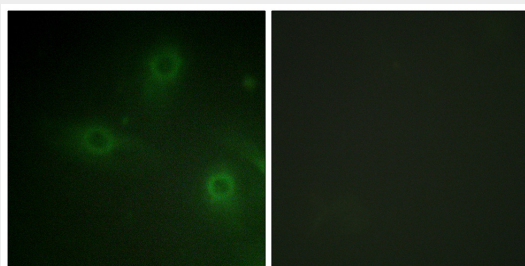
Detected in peripheral blood monocytes and neutrophils (at protein level).

p47 phox Antibody (Ab-304) - Protocols

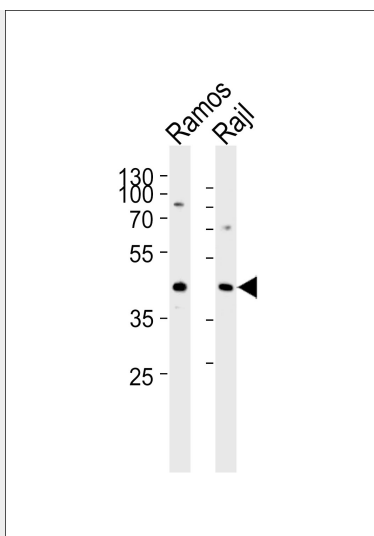
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

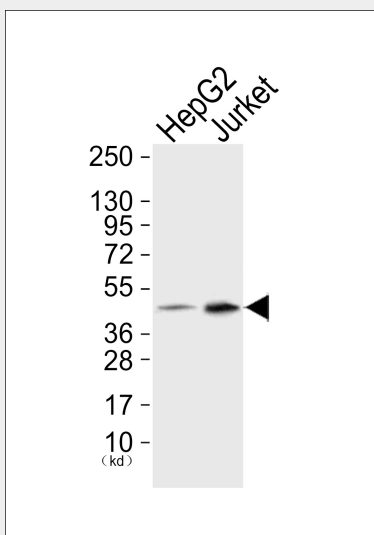
p47 phox Antibody (Ab-304) - Images



Immunofluorescence analysis of HeLa cells, using Neutrophil Cytosol Factor 1 (Ab-304) antibody.



Western blot analysis of lysates from Ramos,Raji cell line (from left to right),using p47 phox Antibody (Ab-304)(B1160). B1160 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Western blot analysis of extracts from HepG2 cells (Lane 1) and Jurket cells (Lane 2), using Neutrophil Cytosol Factor 1 (Ab-304) Antibody. The lane on the left is treated with synthesized peptide.

p47 phox Antibody (Ab-304) - Background

NCF2, NCF1, and a membrane bound cytochrome b558 are required for activation of the latent NADPH oxidase (necessary for superoxide production).

p47 phox Antibody (Ab-304) - References

Volpp B.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:7195-7199(1989).
Volpp B.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:9563-9563(1989).
Lomax K.J.,et al.Science 245:409-412(1989).
Rodaway A.R.F.,et al.Mol. Cell. Biol. 10:5388-5396(1990).
Gorlach A.,et al.J. Clin. Invest. 100:1907-1918(1997).