

**p47-phox Polyclonal Antibody**  
**Catalog # AP71702****Specification****p47-phox Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IF
Primary Accession	<a href="#">P14598</a>
Reactivity	Human, Monkey
Host	Rabbit
Clonality	Polyclonal

**p47-phox Polyclonal Antibody - Additional Information****Gene ID** 653361**Other Names**

NCF1; 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

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.  
IHC-P~~N/A  
IF~~1:50~200

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**p47-phox Polyclonal Antibody - 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 O<sub>2</sub> to produce the superoxide anion (O<sub>2</sub><sup>-</sup>) (PubMed:<a href="http://www.uniprot.org/citations/2547247" target="\_blank">2547247</a>, PubMed:<a href="http://www.uniprot.org/citations/2550933" target="\_blank">2550933</a>, PubMed:<a href="http://www.uniprot.org/citations/38355798" target="\_blank">38355798</a>). 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:<a href="http://www.uniprot.org/citations/38355798" target="\_blank">38355798</a>). 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:<a href="http://www.uniprot.org/citations/38355798" target="\_blank">38355798</a>). 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:<a href="http://www.uniprot.org/citations/12732142" target="\_blank">12732142</a>, PubMed:<a href="http://www.uniprot.org/citations/19801500" target="\_blank">19801500</a>).

#### Cellular Location

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

#### Tissue Location

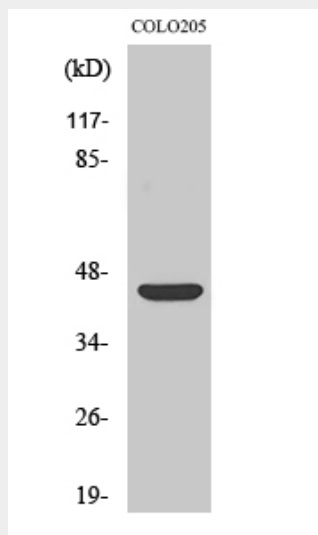
Detected in peripheral blood monocytes and neutrophils (at protein level).

### p47-phox Polyclonal Antibody - Protocols

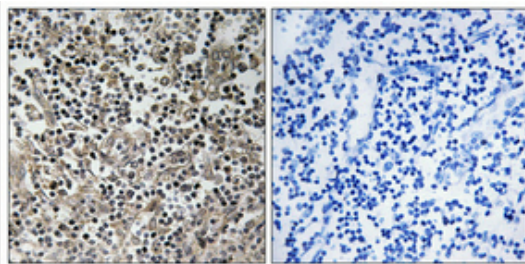
Provided below are standard protocols that you may find useful for product applications.

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

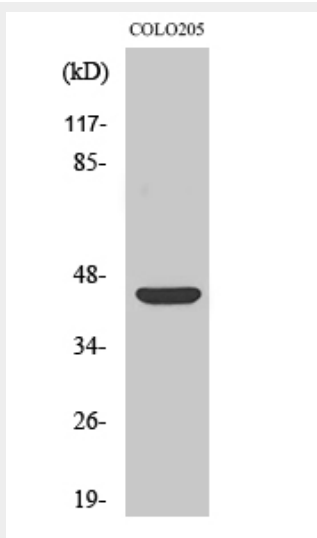
### p47-phox Polyclonal Antibody - Images



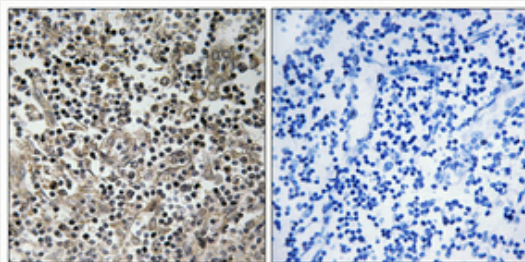
Western Blot analysis of various cells using p47-phox Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



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#### **p47-phox Polyclonal Antibody - Background**

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