

**Anti-p47 phox (pS304) Antibody**  
**Rabbit polyclonal antibody to p47 phox (pS304)**  
**Catalog # AP60344****Specification**

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**Anti-p47 phox (pS304) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P14598</a>
Reactivity	Human, Mouse, Rat, Bovine, SARS, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44682

**Anti-p47 phox (pS304) Antibody - Additional Information****Gene ID** 653361**Other 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

**Target/Specificity**

Recognizes endogenous levels of p47 phox (pS304) protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

IHC~~1:100~500

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-p47 phox (pS304) 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

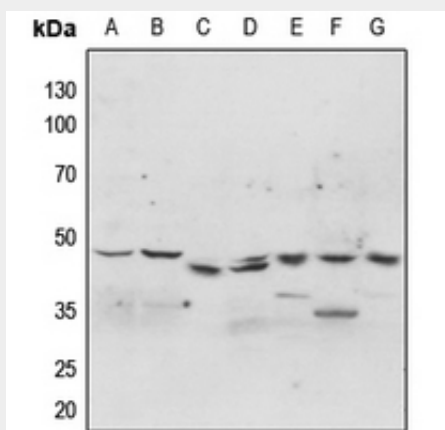
Detected in peripheral blood monocytes and neutrophils (at protein level).

### Anti-p47 phox (pS304) Antibody - Protocols

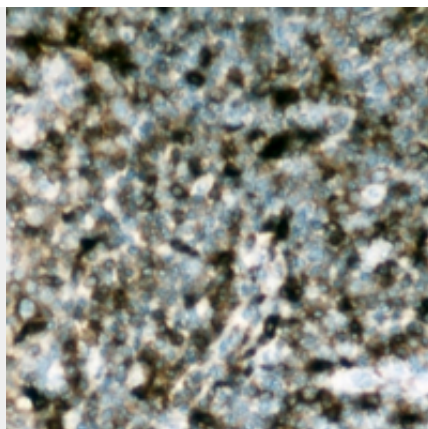
Provided below are standard protocols that you may find useful for product applications.

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

### Anti-p47 phox (pS304) Antibody - Images



Western blot analysis of p47 phox (pS304) expression in HEK293T (A), Hela (B), mouse lung (C), mouse liver (D), rat liver (E), rat spleen (F) whole cell lysates.



Immunohistochemical analysis of p47 phox (pS304) staining in human lymph node 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.

#### **Anti-p47 phox (pS304) Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human p47 phox (pS304). The exact sequence is proprietary.