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# Anti-p47 phox (pS370) Antibody

Rabbit polyclonal antibody to p47 phox (pS370)
Catalog # AP59911

## Product Information

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| **Application** | WB, IP, IF/IC |
| **Primary Accession** | P14598 |
| **Other Accession** | Q09014 |
| **Reactivity** | Human, Mouse, Rat, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 44682 |

## Additional Information

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| **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 (pS370) protein. |
| **Dilution** | WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500), IP (1/10 - 1/100) IP~~N/A IF/IC~~N/A |
| **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 |

## Protein Information

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| **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 |

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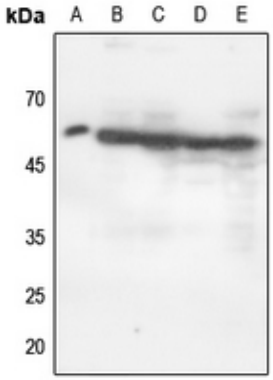
| | oxidase complex with the core NADPH oxidase complex to form a complex at the plasma membrane or phagosomal membrane (PubMed:38355798). This activation process is initiated by phosphorylation dependent binding of the cytosolic NCF1/p47-phox subunit to the C-terminus of CYBA/p22-phox (PubMed:12732142, PubMed:19801500). |
| **Cellular Location** | Cytoplasm, cytosol. Membrane; Peripheral membrane protein; Cytoplasmic side |
| **Tissue Location** | Detected in peripheral blood monocytes and neutrophils (at protein level). |

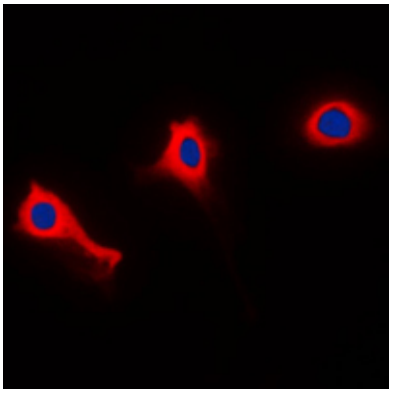
## Background

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

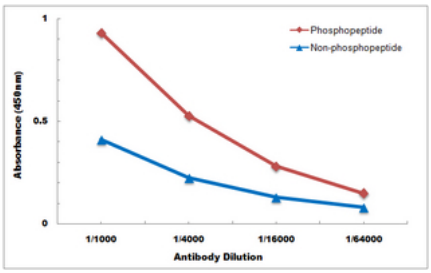
## Images




Western blot analysis of p47 phox (pS370) expression in HEK293T (A), mouse lung (B), mouse liver (C), rat lung (D), rat liver (E) whole cell lysates.



Immunofluorescent analysis of p47 phox (pS370) staining in THP1 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 humidified 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).




Direct ELISA antibody dose-response curve using Anti-p47 phox (pS370) Antibody. Antigen (phosphopeptide and non-phosphopeptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.