

Anti-p47 phox (pS345) Antibody

Rabbit polyclonal antibody to p47 phox (pS345) Catalog # AP60701

Product Information

Application	WB, IHC
Primary Accession	<u>P14598</u>
Other Accession	<u>Q09014</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44682

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 (pS345) protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
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

Name	NCF1 (<u>HGNC:7660</u>)
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: <u>2547247</u> , PubMed: <u>2550933</u> , PubMed: <u>38355798</u>). 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: <u>38355798</u>). 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: <u>38355798</u>). 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: <u>12732142</u> , PubMed: <u>19801500</u>).
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 (pS345) expression in rat lung (A), rat liver (B) whole cell lysates.



Immunohistochemical analysis of p47 phox (pS345) 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.

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