

p47-phox (phospho Ser345) Polyclonal Antibody

Catalog # AP67760

Product Information

Application WB, IHC-P
Primary Accession P14598
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 44682

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.

ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A

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

azide.

Storage Conditions -20°C

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

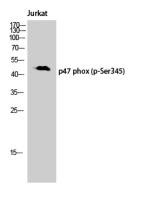
side

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

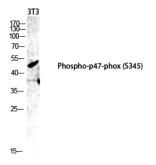
Background

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

Images



Western Blot analysis of Jurkat cells using Phospho-p47-phox (S345) Polyclonal Antibody diluted at 1:1000



Western blot analysis of 3T3 lysis using Phospho-p47-phox (S345) antibody. Antibody was diluted at 1:1000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.