

p47-phox (phospho Ser345) Polyclonal Antibody

Catalog # AP67760

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P14598
Reactivity	Human, Rat, Mouse
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 IF~~1:50~200 ICC~~N/A E~~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 O ₂ to produce the superoxide anion (O ₂ (-)) (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

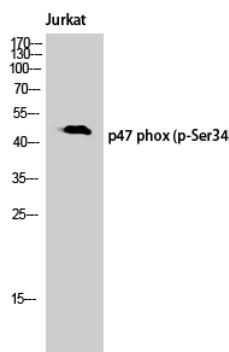
Tissue Location

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

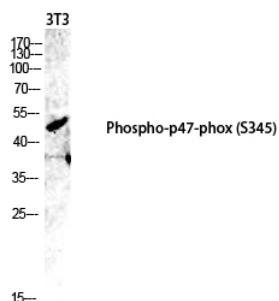
Background

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'.