

p47 phox (Phospho-Ser345) Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52602

Specification

p47 phox (Phospho-Ser345) Antibody - Product Information

Application	WB, IHC
Primary Accession	P14598
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44682

p47 phox (Phospho-Ser345) Antibody - Additional Information

Gene ID 653361

Other Names

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, NCF1, NOXO2, SH3PXD1A

Dilution

WB~~1:1000
IHC~~1:50~100

Format

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

p47 phox (Phospho-Ser345) 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 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:<a href="http://www.uniprot.org/citations/38355798"

target="_blank">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

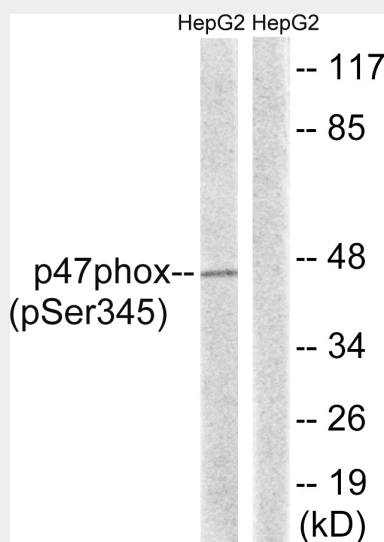
Detected in peripheral blood monocytes and neutrophils (at protein level).

p47 phox (Phospho-Ser345) Antibody - Protocols

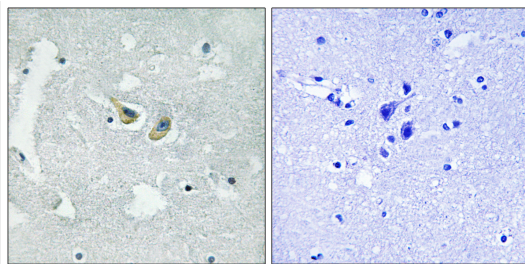
Provided below are standard protocols that you may find useful for product applications.

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

p47 phox (Phospho-Ser345) Antibody - Images



Western blot analysis of extracts from HepG2 cells, treated with TNF (20ng/ml, 5mins), using p47 phox (Phospho-Ser345) antibody.



Immunohistochemistry analysis of paraffin-embedded human brain tissue using p47 phox (Phospho-Ser345) antibody.

p47 phox (Phospho-Ser345) Antibody - Background

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

p47 phox (Phospho-Ser345) Antibody - References

Volpp B.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:7195-7199(1989).
Volpp B.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:9563-9563(1989).
Lomax K.J.,et al.Science 245:409-412(1989).
Rodaway A.R.F.,et al.Mol. Cell. Biol. 10:5388-5396(1990).
Gorlach A.,et al.J. Clin. Invest. 100:1907-1918(1997).