10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

p47-phox Polyclonal Antibody

Catalog # AP71703

Product Information

Application	WB, IHC-P
Primary Accession	P14598
Reactivity	Human, Mouse, Rat
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℃

Protein Information

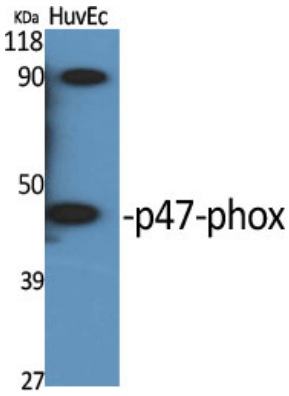
Name	NCF1 (HGNC:7660)
Synonyms	NOXO2, SH3PXD1A
Function	Subunit of the phagocyte NADPH oxidase complex that mediates the transfer of electrons from cytosolic NADPH to O2 to produce the superoxide anion (O2(-)) (PubMed:2547247, PubMed:2550933, PubMed:38355798). In the activated complex, electrons are 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).

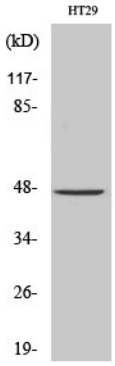
Background

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 various cells using p47-phox Polyclonal Antibody



Western Blot analysis of COLO205 cells using p47-phox Polyclonal Antibody