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NCF1 Antibody

Rabbit Polyclonal Antibody
Catalog # ABV11854

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	P14598
Reactivity	Human, Mouse, Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44682

Additional Information

Gene ID	653361
Positive Control	WB: Jurkat, THP1 cell lysate; IHC: human tonsil tissue; IFC: Jurkat cells
Application & Usage	WB; 1:500 – 1:2000, IHC; 1:50 – 1:200, IF/IC; 1:50 – 1:100
Alias Symbol	NCF1
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, Neutrophil cytosol factor 1
Appearance	Colorless liquid
Formulation	In 0.42% Potassium phosphate; 0.87% Sodium chloride; pH 7.3; 30% glycerol and 0.01% sodium azide
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	NCF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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).

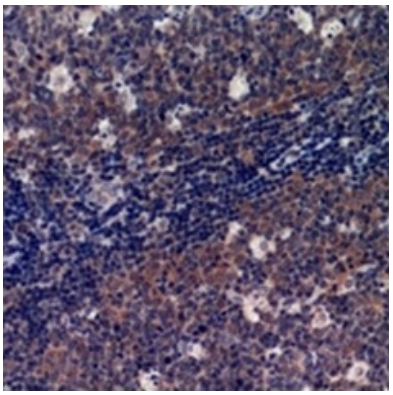
Cellular Location Cytoplasm, cytosol. Membrane; Peripheral membrane protein; Cytoplasmic side

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

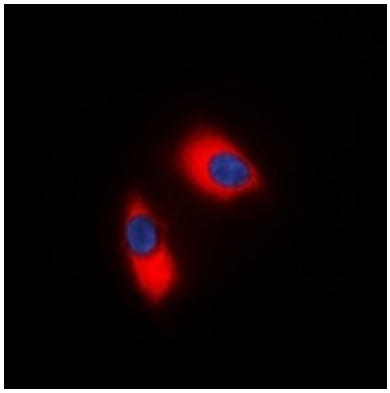
Background

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

Images

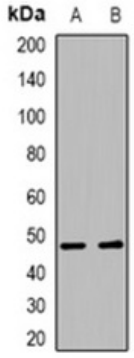


Immunohistochemical analysis of NCF1 staining in human tonsil formalin fixed paraffin embedded tissue section.



Immunofluorescent analysis of NCF1 staining in Jurkat cells.

Western blot analysis of NCF1 expression in Jurkat(A); THP-1(B) whole cell lysates.



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