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NCF4 Rabbit pAb

Catalog # AP96952

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q15080
Other Accession	Q15080
Predicted	Rat, Human, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39032
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NCF4
Epitope Specificity	121-220/339
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 OPR domain.Contains 1 PX (phox homology) domain.Contains 1 SH3 domain.
SUBUNIT	p40-PHOX associates primarily with p67-PHOX to form a complex with p47-PHOX.
DISEASE	Granulomatous disease, chronic, cytochrome-b-positive 3, autosomal recessive (CGD3) [MIM:613960]: A disorder characterized by the inability of neutrophils and phagocytes to kill microbes that they have ingested. Patients suffer from life-threatening bacterial/fungal infections. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	NCF4 is a cytosolic oxidase associated protein. It is a component of the nicotinamide adenine dinucleotide phosphate oxidase, which mediates down regulation of NADPH oxidase through interactions with its SH3 domain. NCF4 is associated with p67 phox but is absent in patients with chronic granulomatous disease who lack p67 phox.

Additional Information

Gene ID	4689
Other Names	CGD3; NCF; P40PHOX; SH3PXD4; NCF4_HUMAN; NCF4; NCF-4; Neutrophil NADPH oxidase factor 4; SH3 and PX domain-containing protein 4; p40-phox (p40phox); neutrophil cytosolic factor 4; neutrophil cytosolic factor 4 (40kD); neutrophil cytosolic factor 4, 40kDa
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NCF4 (HGNC:7662)
Synonyms	SH3PXD4
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(-)) (Probable). 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 (By similarity). 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 (By similarity). This activation process is initiated by phosphorylation dependent binding of the cytosolic NCF1/p47-phox subunit to the C-terminus of CYBA/p22-phox (By similarity).
Cellular Location	Cytoplasm, cytosol. Endosome membrane; Peripheral membrane protein; Cytoplasmic side. Membrane; Peripheral membrane protein. Note=Translocates to the membrane upon activation by phorbol myristate acetate (PMA)
Tissue Location	Expression is restricted to hematopoietic cells.

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