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NCF4 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7615b

Specification

NCF4 Antibody (C-term) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	Q15080
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**39032**
Antigen Region	**260-289**

NCF4 Antibody (C-term) - Additional Information

Gene ID 4689

Other Names
Neutrophil cytosol factor 4, NCF-4, Neutrophil NADPH oxidase factor 4, SH3 and PX domain-containing protein 4, p40-phox, p40phox, NCF4, SH3PXD4

Target/Specificity
This NCF4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 260-289 amino acids from the C-terminal region of human NCF4.

Dilution
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NCF4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NCF4 Antibody (C-term) - Protein Information

Name NCF4 (HGNC:7662)

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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)

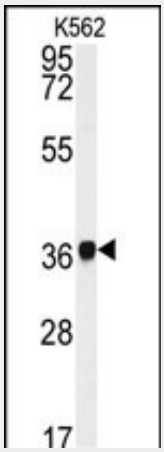
Tissue Location
Expression is restricted to hematopoietic cells.

NCF4 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NCF4 Antibody (C-term) - Images



Western blot analysis of NCF4 antibody (C-term)(Cat.#AP7615b) in K562 cell line lysates (35ug/lane). NCF4 (arrow) was detected using the purified Pab.

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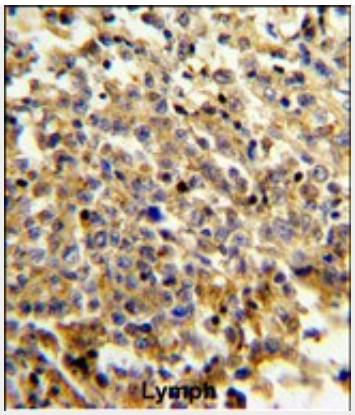
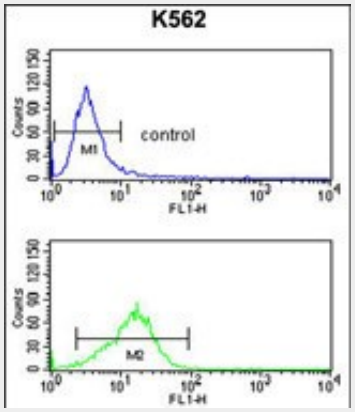


Formalin-fixed and paraffin-embedded human lymphoma reacted with NCF4 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



NCF4 Antibody (C-term) (Cat. #AP7615b) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

NCF4 Antibody (C-term) - Background

NCF4 is a cytosolic regulatory component of the superoxide-producing phagocyte NADPH-oxidase, a multicomponent enzyme system important for host defense. This protein is preferentially expressed in cells of myeloid lineage. It interacts primarily with neutrophil cytosolic factor 2(NCF2/p67-phox) to form a complex with neutrophil cytosolic factor 1 (NCF1/p47-phox), which further interacts with the small G protein RAC1 and translocates to the membrane upon cell stimulation. This complex then activates flavocytochrome b, the membrane-integrated catalytic core of the enzyme system. The PX domain of this protein can bind phospholipid products of the PI(3) kinase, which suggests its role in PI(3) kinase-mediated signaling events. The phosphorylation of this protein was found to negatively regulate the enzyme activity.

NCF4 Antibody (C-term) - References

Glas,J., Seiderer,J. Am. J. Gastroenterol. 104 (3), 665-672 (2009)
Honbou,K. Seikagaku 80 (8), 743-747 (2008)
Dusi,S., Donini,M. Biochem. J. 314 (PT 2), 409-412 (1996)
Leto,T.L. Proc. Natl. Acad. Sci. U.S.A. 91 (22), 10650-10654 (1994)