

NCF4 Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP7615b

### Specification

# NCF4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

#### <u>Q15080</u>

## NCF4 Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody <a href=/products/AP7615b>AP7615b</a> was selected from the C-term region of human NCF4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### NCF4 Antibody (C-term) Blocking Peptide - Protein Information

Name NCF4

Synonyms SH3PXD4

#### Function

Component of the NADPH-oxidase, a multicomponent enzyme system responsible for the oxidative burst in which electrons are transported from NADPH to molecular oxygen, generating reactive oxidant intermediates. It may be important for the assembly and/or activation of the NADPH-oxidase complex.

#### **Cellular Location**

Cytoplasm, cytosol. Endosome membrane; Peripheral membrane protein; Cytoplasmic side. Membrane; Peripheral membrane protein



Tissue Location

Expression is restricted to hematopoietic cells.

# NCF4 Antibody (C-term) Blocking Peptide - Protocols

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

### <u>Blocking Peptides</u>

## NCF4 Antibody (C-term) Blocking Peptide - Images

## NCF4 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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)