

# **Rabbit Anti-NCF1 antibody**

## SL6966R

Product Name:	NCF1
Chinese Name:	NADPH氧化酶活化蛋白p47抗体
Alias:	47 kDa autosomal chronic granulomatous disease protein; 47 kDa neutrophil oxidase factor; NADPH oxidase organizer 2; NCF 47K; NCF-1; NCF-47K; NCF1_HUMAN; Neutrophil cytosol factor 1; Neutrophil cytosolic factor 1; Neutrophil NADPH oxidase factor 1; Nox organizer 2; Nox organizing protein 2; Nox-organizing protein 2; NOXO2; p47 phox; p47-phox; SH3 and PX domain containing protein 1A; SH3 and PX domain-containing protein 1A; SH3PXD1A.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	43kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human p47-phox:12-120/390
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	PubMed
Product Detail:	The heredity chronic granulomatous disease (CGF) has been linked to mutations in p47-phox and p67-phox. The cytosolic proteins p47-phox and p67-phox, also designated

neutrophil cytosol factor (NCF)1 and NCF2, respectively, are required for activation of the superoxide-producing NADPH oxidase in neutrophils and other phagocytic cells. During activation of the NADPH oxidase, p47-phox and p67-phox migrate to the plasma membrane where they associate with cytochrome b558 and the small G protein Rac to form the functional enzyme complex. Both p47-phox and p67-phox contain two Src homology 3 (SH3) domains. The C-terminal SH3 domain of p67-phox has been shown to interact with the proline-rich domain of p47-phox, suggesting that p47-phox may faciliate the transport of p67-phox to the membrane.

#### Function:

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

#### **Subunit:**

Interacts with NOXA1. Interacts with ADAM15. Interacts with TRAF4. Interacts with FASLG.

#### **Subcellular Location:**

Cytoplasm.

#### Post-translational modifications:

Phosphorylated by PRKCD; phosphorylation induces activation of NCF1 and NADPH oxidase activity.

#### **DISEASE:**

Defects in NCF1 are the cause of chronic granulomatous disease autosomal recessive cytochrome-b-positive type 1 (CGD1) [MIM:233700]. Chronic granulomatous disease is a genetically heterogeneous disorder characterized by the inability of neutrophils and phagocytes to kill microbes that they have ingested. Patients suffer from life-threatening bacterial/fungal infections.

#### Similarity:

Contains 1 PX (phox homology) domain.

Contains 2 SH3 domains.

#### **SWISS:**

P14598

#### Gene ID:

653361

#### Database links:

Entrez Gene: 653361 Human

Entrez Gene: 17969 Mouse

Entrez Gene: 114553Rat

Omim: 608512Human

SwissProt: P14598Human

SwissProt: Q09014Mouse

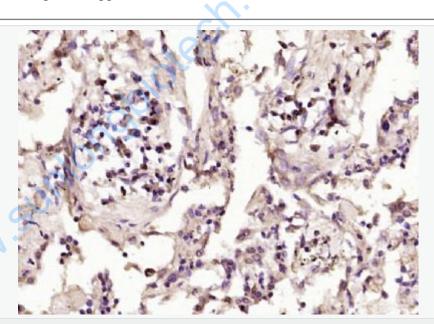
<u>Unigene: 647047</u>Human

Unigene: 655201Human

Unigene: 425296Mouse

### **Important Note:**

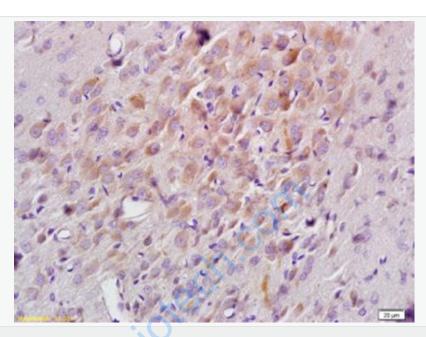
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



#### Picture:

Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NCF1) Polyclonal Antibody, Unconjugated (SL6966R) at 1:200 overnight at 4°C, followed by operating

according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-p47-phox Polyclonal Antibody, Unconjugated(SL6966R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining