

Rabbit Anti-phospho-NCF1 (Ser359) antibody

SL11445R

Product Name:	phospho-NCF1 (Ser359)
Chinese Name:	磷酸化嗜中性粒细胞胞浆因子1抗体
Alias:	phospho-NCF1(Ser359); phospho-p47 phox(Ser359); NCF1 (phospho S359); 47 kDa autosomal chronic granulomatous disease protein; 47 kDa neutrophil oxidase factor; NADPH oxidase organizer 2; NCF 47K; Neutrophil cytosol factor 1; Neutrophil cytosolic factor 1; Neutrophil NADPH oxidase factor 1; Nox organizer 2; Nox organizing protein 2; NOXO2; p47 phox; p47phox; ;SH3 and PX domain containing protein 1A; SH3PXD1A; NADPH oxidase p47 phox; NCF1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human NCF1 around the phosphorylation site of Ser359:QR(p-S)K
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:	<u>PubMed</u>

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: 281345 Cow

Product Detail:

Entrez Gene: 653361 Human

Entrez Gene: 17969 Mouse

Entrez Gene: 100134857 Pig

Entrez Gene: 100008803 Rabbit

Entrez Gene: 114553 Rat

Omim: 608512 Human

SwissProt: O77774 Cow

SwissProt: P14598 Human

SwissProt: Q09014 Mouse

<u>Unigene: 647047</u> Human

Unigene: 655201 Human

Unigene: 425296 Mouse

Unigene: 38575 Rat

Important Note:

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