

Goat Anti-NCF1 / p47phox Antibody
Peptide-affinity purified goat antibody
Catalog # AF1709a**Specification**

Goat Anti-NCF1 / p47phox Antibody - Product Information

Application	WB, E
Primary Accession	P14598
Other Accession	NP_000256 , 653361 , 17969 (mouse) , 114553 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Rabbit, Pig
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	44682

Goat Anti-NCF1 / p47phox Antibody - Additional Information**Gene ID** 653361**Other Names**

Neutrophil cytosol factor 1, NCF-1, 47 kDa autosomal chronic granulomatous disease protein, 47 kDa neutrophil oxidase factor, NCF-47K, Neutrophil NADPH oxidase factor 1, Nox organizer 2, Nox-organizing protein 2, SH3 and PX domain-containing protein 1A, p47-phox, NCF1, NOXO2, SH3PXD1A

Dilution

WB~~1:1000
E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-NCF1 / p47phox Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-NCF1 / p47phox Antibody - Protein Information**Name** NCF1 ([HGNC:7660](#))

Synonyms NOXO2, SH3PXD1A**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⁻) (PubMed:2547247, PubMed:2550933, PubMed:38355798). 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 (PubMed:38355798). 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 (PubMed:38355798). This activation process is initiated by phosphorylation dependent binding of the cytosolic NCF1/p47-phox subunit to the C-terminus of CYBA/p22-phox (PubMed:12732142, PubMed:19801500).

Cellular Location

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

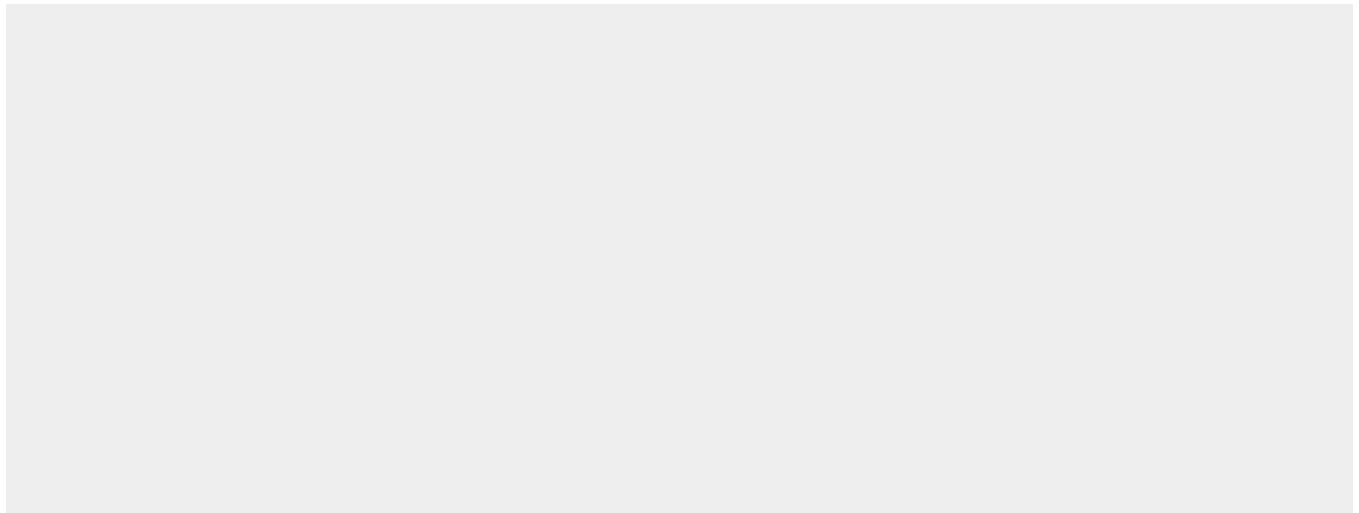
Tissue Location

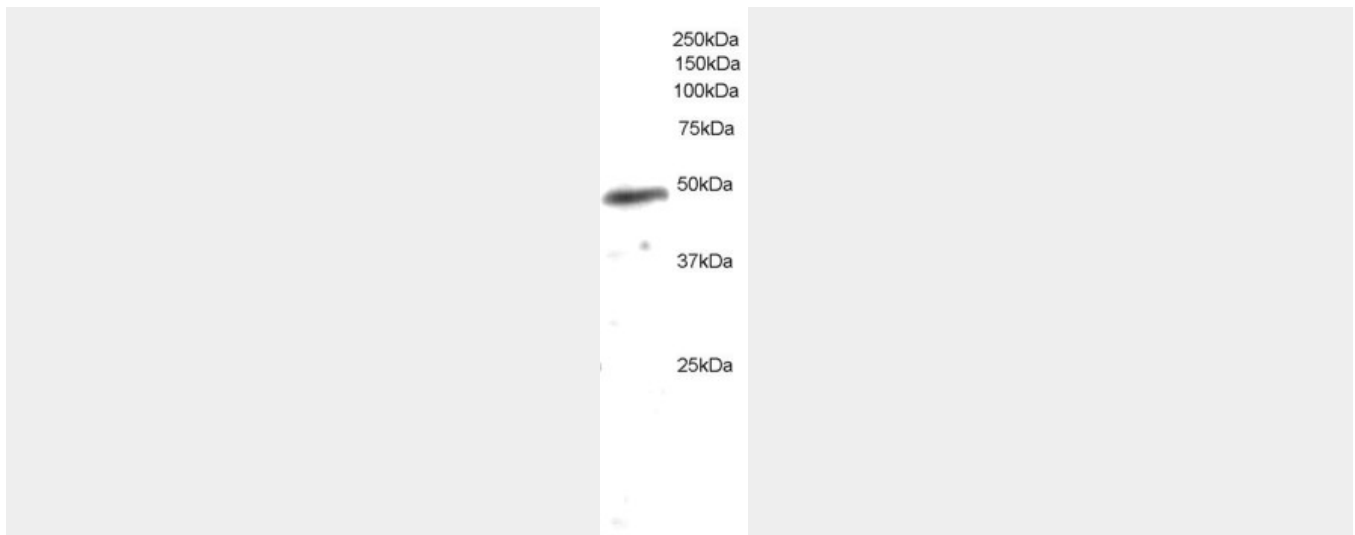
Detected in peripheral blood monocytes and neutrophils (at protein level).

Goat Anti-NCF1 / p47phox Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-NCF1 / p47phox Antibody - Images



AF1709a (0.2 µg/ml) staining of U937 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-NCF1 / p47phox Antibody - Background

The protein encoded by this gene is a 47 kDa cytosolic subunit of neutrophil NADPH oxidase. This oxidase is a multicomponent enzyme that is activated to produce superoxide anion. Mutations in this gene have been associated with chronic granulomatous disease.

Goat Anti-NCF1 / p47phox Antibody - References

Hematologically important mutations: the autosomal recessive forms of chronic granulomatous disease (second update). Roos D, et al. *Blood Cells Mol Dis*, 2010 Apr 15. PMID 20167518.
Integrative predictive model of coronary artery calcification in atherosclerosis. McGeachie M, et al. *Circulation*, 2009 Dec 15. PMID 19948975.
NOX activity is increased in mild cognitive impairment. Bruce-Keller AJ, et al. *Antioxid Redox Signal*, 2010 Jun 15. PMID 19929442.
Dynammin 2 and c-Abl are novel regulators of hyperoxia-mediated NADPH oxidase activation and reactive oxygen species production in caveolin-enriched microdomains of the endothelium. Singleton PA, et al. *J Biol Chem*, 2009 Dec 11. PMID 19833721.
Identification of SH3 domain interaction partners of human FasL (CD178) by phage display screening. Voss M, et al. *BMC Immunol*, 2009 Oct 6. PMID 19807924.