**BACKGROUND**

The heredity disease chronic granulomatous disease (CGD) has been linked to mutations in p47-phox and p67-phox. The cytosolic proteins p47-phox and p67-phox, also designated neutrophil cytosol factor (NCF1) 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 facilitate the transport of p67-phox to the membrane.

**CHROMOSOMAL LOCATION**

Genetic locus: NCF1/NCF1B (human) mapping to 7q11.23; Ncf1 (mouse) mapping to 5G2.

**SOURCE**

p47-phox (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of p47-phox of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7660 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

p47-phox (C-20) is recommended for detection of p47-phox of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p47-phox (C-20) is also recommended for detection of p47-phox in additional species, including bovine and porcine.


Molecular Weight of p47-phox: 47 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Daudi cell lysate: sc-2415 or RAW 264.7 whole cell lysate: sc-2211.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

![Western blot analysis of p47-phox expression in whole cell lysates prepared from control (A) and DM150 treated (B) HL-60 cells.](image)

**SELECT PRODUCT CITATIONS**


