**BACKGROUND**

The hereditary 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: NCF2 (human) mapping to 1q25.3; Ncf2 (mouse) mapping to 1 G3.

**SOURCE**

p67-phox (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of p67-phox of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p67-phox (N-19) is available conjugated phycoerythrin (sc-7663PE, 200 µg/ml), for IF, IHC(P) and FCM. Blocking peptide available for competition studies, sc-7663P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

p67-phox (N-19) is recommended for detection of p67-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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**STORAGE**

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

**SELECT PRODUCT CITATIONS**


**TRY p67-phox (D-6): sc-374510, our highly recommended monoclonal alternative to p67-phox (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see p67-phox (D-6): sc-374510.**