



## NCF2 Polyclonal Antibody

E91178

**Catalog Number:** E91178**Amount:** 100ul

**Background:** The phagocytic NADPH oxidase is a multiprotein enzyme that catalyzes the reduction of oxygen to superoxide in response to pathogenic invasion. The NADPH oxidase consists of 6 subunits, including the membrane-bound p91 phox and p22 phox heterodimers (also known as cytochrome b558), the cytosolic complex of p40phox, p47phox and p67phox, and the small GTPase Rac2. Activation of NADPH oxidase is initiated by cytosolic complex phosphorylation, which induces a conformational change that leads to the translocation of the cytosolic complex to the membrane and formation of an active enzyme with cytochrome b558 (1). Defects in p47phox, often resulting from recombination between p47phox and a nearby homologous pseudogene, cause chronic granulomatous disease (2-4). Elevated oxidative stress due to increased myocardial NADPH oxidase activity may be a contributing factor in heart failure (5,6). p67phox appears to coordinate assembly of NADPH oxidase as it associates with multiple subunits as well as the  $\alpha$  subunit of heterotrimeric G proteins (7). Mutations in the corresponding p67phox gene are also associated with a form of autosomal recessive chronic granulomatous disease (8).

**Species:** Rabbit**Isotype:** IgG

**Storage/Stability:** Store at -20°C or -80°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Synonyms:** NCF2;FLJ93058;NCF-2;NOXA2;P67-PHOX;P67PHOX ;

**Immunogen:** Recombinant protein of human NCF2

**Purification:** Affinity purification

**Reactivity:** H M R

**Applications:** WB IHC

**Molecular Weight:** 60kDa

**Swiss-Prot No. :** P19878

**Gene ID:** 4688

**References:** 1. Babior, B.M. (1999) Blood 93, 1464-76. 2. Noack, D. et al. (2001) Blood 97, 305-11. 3. Görlach, A. et al. (1997) J Clin Invest 100, 1907-18. 4. Chanock, S.J. et al. (2000) Blood Cells Mol Dis 26, 37-46. 5. Heymes, C. et al. (2003) J Am Coll Cardiol 41, 2164-71. 6. Doerries, C. et al. (2007) Circ Res 100, 894-903. 7. Marty, C. et al. (2006) Mol Cell Biol 26, 5190-200. 8. Leto, T.L. et al. (1990) Science 248, 727-30.

**For Research Use Only**

