**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 (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 facilitate the transport of p67-phox to the membrane.

**Chromosomal Location**

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

**Source**

p47-phox (A-7) is a mouse monoclonal antibody raised against amino acids 196-390 of p47-phox of human origin.

**Product**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p47-phox (A-7) is available conjugated to agarose (sc-17844 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-17844 HRP), 200 µg/ml, for WB, HcIP and ELISA; to either phycoerythrin (sc-17844 PE), fluorescein (sc-17844 FITC), Alexa Fluor® 488 (sc-17844 AF488), Alexa Fluor® 546 (sc-17844 AF546), Alexa Fluor® 594 (sc-17844 AF594) or Alexa Fluor® 647 (sc-17844 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either phycoerythrin (sc-17844 PE), fluorescein (sc-17844 FITC), Alexa Fluor® 488 (sc-17844 AF488), Alexa Fluor® 546 (sc-17844 AF546), Alexa Fluor® 594 (sc-17844 AF594) or Alexa Fluor® 647 (sc-17844 AF647), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.


Molecular Weight of p47-phox: 47 kDa.


**Select Product Citations**


**Storage**

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

**Data**

- Western blot analysis of p47-phox expression in J774.A1 (A) and A-10 (B) whole cell lysates and rat liver tissue extract (C).

**Select RESEARCH USE**

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

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