p22-phox (E-11): sc-271968

BACKGROUND

Mox1 and the glycoprotein gp91-phox are largely related proteins that are essential components of the NADPH oxidase. The superoxide-generating NADPH oxidase is present in phagocytes, neuroepithelial bodies, vascular smooth muscle cells and endothelial cells. It includes a membrane-bound flavocytochrome containing two subunits, gp91-phox and p22-phox, and the cytosolic proteins p47-phox and p67-phox. During activation of the NADPH oxidase, p47-phox and p67-phox migrate to the plasma membrane where they associate with the flavocytochrome, cytochrome b558, to form the active enzyme complex. The p22 and gp91-phox subunits also function as surface O2 sensors that initiate cellular signaling in response to hypoxic conditions.

CHROMOSOMAL LOCATION

Genetic locus: CYBA (human) mapping to 16q24.3; Cyba (mouse) mapping to 8 E1.

SOURCE

p22-phox (E-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 133-159 near the C-terminus of p22-phox of human origin.

PRODUCT

Each vial contains 200 µg IgG2b, kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p22-phox (E-11) is available conjugated to agarose (sc-271968 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271968 HRP), 200 µg/ml, for WB, IHC(PE) and ELISA; to either phycoerythrin (sc-271968 PE), fluorescein (sc-271968 FITC), Alexa Fluor® 488 (sc-271968 AF488), Alexa Fluor® 546 (sc-271968 AF546), Alexa Fluor® 594 (sc-271968 AF594) or Alexa Fluor® 647 (sc-271968 AF647), 200 µg/ml, for WB (RGB), IF, IHC(PE) and FCM; and to either Alexa Fluor® 680 (sc-271968 AF680) or Alexa Fluor® 790 (sc-271968 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271968 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

p22-phox (E-11) is recommended for detection of p22-phox of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).


Molecular Weight of p22-phox: 22 kDa.

STORAGE

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

DATA

SELECT PRODUCT CITATIONS


RESEARCH USE

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

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