Pl 3-kinase p85α/β/p55γ (D-9): sc-374534

BACKGROUND
Phosphatidylinositol 3-kinase (PI 3-kinase) phosphorylates the 3’ OH position of the inositol ring of inositol lipids and is composed of p85 and p110 sub-units. PI 3-kinase p85 lacks PI 3-kinase activity and acts as an adapter, coupling p110 to activated protein tyrosine kinase. Both PI 3-kinase p85α and PI 3-kinase p85β possess one SH3 and two SH2 domains. PI 3-kinase p85α, also known as Grb1, phosphatidylinositol 3-kinase regulatory 1 or p85, is a 724 amino acid protein that exists as 4 alternatively spliced isoforms. Involved in Insulin metabolism, defects in the PI 3-kinase p85α gene have been linked to Insulin resistance. PI 3-kinase p85α is polyubiquitinated in T cells by Cbl-b, and has multiple phosphorylated amino acid residues, including a phosphorylated tyrosine residue at position 467. PI 3-kinase p85γ contains 1,102 amino acids and is encoded by a gene that maps to human chromosome 7.

SOURCE
PI 3-kinase p85α/β/p55γ (D-9) is a mouse monoclonal antibody raised against amino acids 323-596 mapping within an internal region of PI 3-kinase p85β of human origin.

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

PI 3-kinase p85α/β/p55γ (D-9) is available conjugated to agarose (sc-374534 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374534 HRP), 200 µg/ml, for WB, WBIP (HRP) and ELISA; to either phycoerythrin (sc-374534 PE), fluorescein (sc-374534 FITC), Alexa Fluor® 488 (sc-374534 AF488), Alexa Fluor® 546 (sc-374534 AF546), Alexa Fluor® 594 (sc-374534 AF594) or Alexa Fluor® 647 (sc-374534 AF647), 200 µg/ml, for WB (RGB), IF, IFP (HRP) and FCM; and to either Alexa Fluor® 680 (sc-374534 AF680) or Alexa Fluor® 790 (sc-374534 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS
PI 3-kinase p85α/β/p55γ (D-9) is recommended for detection of PI 3-kinase p85α, PI 3-kinase p85β and PI 3-kinase p55γ 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PI 3-kinase p85α/β/p55γ (D-9) is also recommended for detection of PI 3-kinase p85α, PI 3-kinase p85β and PI 3-kinase p55γ in additional species, including canine and bovine.

Molecular Weight of PI 3-kinase p85α/β/p55γ isoforms: 84/53/50/84 kDa.

Positive Controls: SW480 cell lysate: sc-2219, A-431 whole cell lysate: sc-2201 or COLO 205 whole cell lysate: sc-364177.

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.

PROTOCOLS
See our web site at www.scbt.com for detailed protocols and support products.