



PHIP (M-260): sc-68353

BACKGROUND

PHIP (Pleckstrin homology domain interacting protein), also known as ndrp or WDR11, is a 1,821 amino acid protein that contains eight N-terminal WD40 repeats and two bromodomains. It is expressed in skeletal muscle (localizing to the cytosol and nucleus) and primary β cells (localizing to the nucleus) and acts as a transcriptional activator. PHIP is known to interact with various members of the insulin receptor substrate (IRS) family. The IRS family of proteins mediate insulin receptor signaling and play an important role in insulin-producing β cell proliferation and survival. PHIP specifically associates with the PH domain of IRS-1 and may function to link IRS-1 to insulin receptors, indicating a vital role of PHIP in the regulation of insulin signaling. Further supporting this role of PHIP, mutations in the gene encoding PHIP disrupt IRS-mediated signaling pathways resulting in the inhibition of Glut4 translocation in muscle cells. PHIP is also known to bind IRS-2 and may play a similar role linking IRS-2 to insulin receptors.

REFERENCES

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STORAGE

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

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: PHIP (human) mapping to 6q14; Phip (mouse) mapping to 9 E3.1.

SOURCE

PHIP (M-260) is a rabbit polyclonal antibody raised against amino acids 1486-1745 mapping near the C-terminus of PHIP of mouse origin.

PRODUCT

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

APPLICATIONS

PHIP (M-260) is recommended for detection of PHIP of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 μ g per 100–500 μ g 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).

Suitable for use as control antibody for PHIP siRNA (h): sc-62800 and PHIP siRNA (m): sc-62801.

Molecular Weight of PHIP: 206 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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