BACKGROUND

Individuals harboring germline mutations in the tumor suppressor gene von Hippel-Lindau (VHL) exhibit an increased susceptibility to a variety of tumors including renal carcinoma, hemangioblastoma of the central nervous system and pheochromocytoma. The Elongin (SIII) complex has been identified as the functional target of the VHL protein. Elongin (SIII) is a heterotrimer composed of a transcriptional active subunit designated Elongin A and two regulatory subunits designated Elongin B and Elongin C. VHL functions by binding to the Elongin B and C subunits, inhibiting the transcriptional efficacy of the Elongin (SIII) complex. Different isoforms of VHL have been observed, encoded by alternatively spliced transcript variants. The molecular weight of each isoform varies between species.

CHROMOSOMATIC LOCATION

Genetic locus: VHL (human) mapping to 3p25.3; Vhl (mouse) mapping to 6 E3.

SOURCE

VHL (VHL40) is a mouse monoclonal antibody raised against amino acids 54-213 of VHL of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

VHL (VHL40) is available conjugated to agarose (sc-135657 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-135657 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-135657 PE), fluorescein (sc-135657 FITC), Alexa Fluor® 488 (sc-135657 AF488) or Alexa Fluor® 647 (sc-135657 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

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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.

APPLICATIONS

VHL (VHL40) is recommended for detection of VHL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for VHL siRNA (h): sc-36816, VHL siRNA (m): sc-36817, VHL shRNA Plasmid (h): sc-36816-SH, VHL shRNA Plasmid (m): sc-36817-SH, VHL shRNA (h) Lentiviral Particles: sc-36816-V and VHL shRNA (m) Lentiviral Particles: sc-36817-V.

Molecular Weight of VHL isoforms: 18/24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Daudi cell lysate: sc-2415.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

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.

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