SANTA CRUZ BIOTECHNOLOGY, INC.

Diversin (G-9): sc-365390

BACKGROUND

Diversin, also known as ANKRD6 (ankyrin repeat domain 6), is a 727 amino acid protein that contains eight ankyrin repeats and belongs to the ankyrin repeat domain protein family. Members of the ankyrin repeat domain family facilitate protein-protein interactions and function as adaptors of signaling pathways. Expressed in a developmentally-regulated manner and at highest levels in the brain, Diversin is believed to play a role in brain development. Via its ankyrin repeats, Diversin can directly interact with Dvl (dishevelled), an interaction that is essential for the activation of noncanonical Wnt signaling. In addition, Diversin contains a C-terminal domain that binds Axin/Con-ductin and a casein kinase-binding domain in its central region that specifically binds casein kinase Iε. Through the action of these additional domains, Diversin may also facilitate canonical Wnt signaling. Due to alternative splicing events, three Diversin isoforms exist.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD6 (human) mapping to 6q15; Ankrd6 (mouse) mapping to 4 A5.

SOURCE

Diversin (G-9) is a mouse monoclonal antibody raised against amino acids 231-480 mapping within an internal region of Diversin of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Diversin (G-9) is available conjugated to agarose (sc-365390 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365390 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365390 PE), fluorescein (sc-365390 FITC), Alexa Fluor® 488 (sc-365390 AF488), Alexa Fluor® 546 (sc-365390 AF546), Alexa Fluor® 594 (sc-365390 AF594) or Alexa Fluor® 647 (sc-365390 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365390 AF680) or Alexa Fluor® 790 (sc-365390 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Diversin (G-9) is recommended for detection of Diversin 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).

Suitable for use as control antibody for Diversin siRNA (h): sc-95219, Diversin siRNA (m): sc-143050, Diversin shRNA Plasmid (h): sc-95219-SH, Diversin shRNA Plasmid (m): sc-143050-SH, Diversin shRNA (h) Lentiviral Particles: sc-95219-V and Diversin shRNA (m) Lentiviral Particles: sc-143050-V.

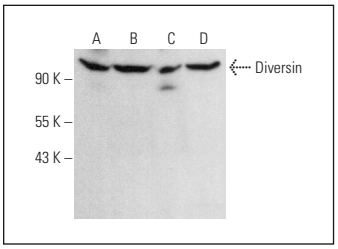
Molecular Weight of Diversin: 80 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or c4 whole cell lysate: sc-364186.

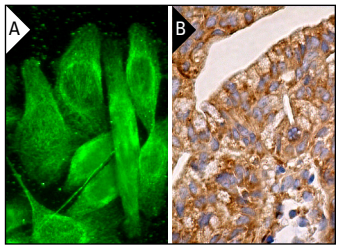
RECOMMENDED SUPPORT REAGENTS

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



Diversin (G-9): sc-365390. Western blot analysis of Diversin expression in HeLa (**A**), MCF7 (**B**), c4 (**C**) and AT3B-1 (**D**) whole cell lysates.



Diversin (G-9): sc-365390. Immunofluorescence staining of formalin-fixed SW480 cells showing membrane and cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane and cytoplasmic staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Luan, L., et al. 2023. Diversin upregulates the proliferative ability of colorectal cancer by inducing cell cycle proteins. Exp. Mol. Pathol. 129: 104850.

STORAGE

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

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.