SANTA CRUZ BIOTECHNOLOGY, INC.

DIP2A (H-48): sc-292415

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DIP2A (disco-interacting protein 2 homolog A), also known as DIP2, is a 1571 amino acid nuclear protein. It is one of three human homologs (DIP2A, DIP2B and DIP2C) of the Drosophila dip2 (disconnected-interacting protein 2) protein. In Drosophila, dip2 interacts with disco, a protein required for neuronal connections in the visual systems of larvae and adults. The closest vertebrate homologs to disco are the basonuclin genes. In mice, DIP2 homologs show restricted expression to the brain. This suggests that, similar to the function of Drosophila dip2, vertebrate DIP2 homologs may play a role in the development of the nervous system. Expressed ubiquitously with highest expression in the brain, DIP2A is thought to function in signaling throughout the central nervous system by providing positional clues for axon patterning and pathfinding. Four isoforms of DIP2A exist due to alternative splicing events.

REFERENCES

1. Mukhopadhyay, M., et al. 2002. Cloning, genomic organization and expression pattern of a novel Drosophila gene, the disco-interacting protein 2 (dip2), and its murine homolog. Gene 293: 59-65.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607711. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. DeSousa, D., et al. 2003. A novel double-stranded RNA-binding protein, disco interacting protein 1 (DIP1), contributes to cell fate decisions during Drosophila development. J. Biol. Chem. 278: 38040-38050.
4. De Felice, B., et al. 2003. Characterization of DIP1, a novel nuclear protein in Drosophila melanogaster. Biochem. Biophys. Res. Commun. 307: 224-228.
5. Bondos, S.E., et al. 2004. Hox transcription factor ultrabithorax Ib physically and genetically interacts with disconnected interacting protein 1, a double-stranded RNA-binding protein. J. Biol. Chem. 279: 26433-26444.

CHROMOSOMAL LOCATION

Genetic locus: DIP2A (human) mapping to 21q22.3.

SOURCE

DIP2A (H-48) is a rabbit polyclonal antibody raised against amino acids 41-88 mapping near the N-terminus of DIP2A of human origin.

PRODUCT

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

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.

APPLICATIONS

DIP2A (H-48) is recommended for detection of DIP2A of 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DIP2A (H-48) is also recommended for detection of DIP2A in additional species, including equine.

Suitable for use as control antibody for DIP2A siRNA (h): sc-62212, DIP2A shRNA Plasmid (h): sc-62212-SH and DIP2A shRNA (h) Lentiviral Particles: sc-62212-V.

Molecular Weight of DIP2A: 170 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.