# DIP2A (N-18): sc-67556



The Power to Question

#### **BACKGROUND**

DIP2A (disco-interacting protein 2 homolog A), also known as DIP2, is a 1,571 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 *Drosphila* 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**

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- DeSousa, D., Mukhopadhyay, M., Pelka, P., Zhao, X., Dey, B.K., Robert, V., Pelisson, A., Bucheton, A. and Campos, A.R. 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.
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- Bondos, S.E., Tan, X.X., Bicknell, A., Li, L. and Matthews, K.S. 2004. Hox transcription factor ultrabithorax lb 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; Dip2a (mouse) mapping to 10 C1.

# SOURCE

DIP2A (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DIP2A of human origin.

# **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67556 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

DIP2A (N-18) is recommended for detection of DIP2A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 DIP2A siRNA (h): sc-62212, DIP2A siRNA (m): sc-62213, DIP2A siRNA (r): sc-270457, DIP2A shRNA Plasmid (h): sc-62212-SH, DIP2A shRNA Plasmid (m): sc-62213-SH, DIP2A shRNA Plasmid (r): sc-270457-SH, DIP2A shRNA (h) Lentiviral Particles: sc-62212-V, DIP2A shRNA (m) Lentiviral Particles: sc-62213-V and DIP2A shRNA (r) Lentiviral Particles: sc-270457-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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **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 or our catalog for detailed protocols and support products.



Try **DIP2A (4E6): sc-293390**, our highly recommended monoclonal alternative to DIP2A (N-18).

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