BACKGROUND

Dio-1 (death inducer-obliterator-1) is a putative transcription factor that contains two zinc finger motifs. Dio-1 translocates to the nucleus, and activates apoptosis during limb development. Programmed cell death, a highly regulated form of apoptosis, plays an important role in determining the amount of tissue, the shape and the definition of each digit during limb development. Dio-1 expression is upregulated when an apoptotic signal is detected, and subsequently apoptosis is induced. This process is similar to the expression of NFκB and NGF in response to external signals. Dio-1 expression is suppressed by caspase inhibitors and Bcl-2 expression. This supports the theory that Dio-1 functions in the onset of programmed cell death.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: DIDO1 (human) mapping to 20q13.33; Dido1 (mouse) mapping to 2H4.

SOURCE

Dio-1 (B-9) is a mouse monoclonal antibody raised against amino acids 315-614 of Dio-1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Dio-1 (B-9) is recommended for detection of Dio-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:5000), 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 Dio-1 siRNA (h): sc-35194, Dio-1 siRNA (m): sc-35195, Dio-1 shRNA Plasmid (h): sc-35194-SH, Dio-1 shRNA Plasmid (m): sc-35195-SH, Dio-1 shRNA (h) Lentiviral Particles: sc-35194-V and Dio-1 shRNA (m) Lentiviral Particles: sc-35195-V.

Molecular Weight of DIDO4/DIDO2/a isoforms: 244/129/61 kDa.

Positive Controls: Dio-1 (h2): 293T Lysate: sc-159185, Jurkat whole cell lysate: sc-2204 or Jurkat nuclear extract: sc-2132.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:


DATA

SELECT PRODUCT CITATIONS


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.