

Dio-1 (h2): 293T Lysate: sc-159185

BACKGROUND

Dio-1 (death inducer-obliator-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 NF κ B 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

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4. Kanegae, Y., et al. 1998. Role of Rel/NF κ B transcription factors during the outgrowth of the vertebrate limb. *Nature* 392: 611-614.
5. Garcia-Domingo, D., et al. 1999. DIO-1 is a gene involved in onset of apoptosis *in vitro*, whose misexpression disrupts limb development. *Proc. Natl. Acad. Sci. USA* 96: 7992-7997.
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CHROMOSOMAL LOCATION

Genetic locus: DIO1 (human) mapping to 20q13.33.

PRODUCT

Dio-1 (h2): 293T Lysate represents a lysate of human Dio-1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Dio-1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Dio-1 antibodies. Recommended use: 10-20 μ l per lane.

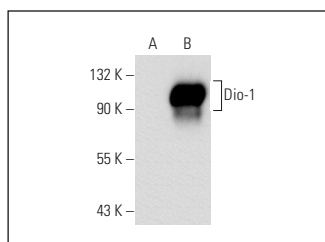
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Dio-1 (B-9): sc-25264 is recommended as a positive control antibody for Western Blot analysis of enhanced human Dio-1 expression in Dio-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



Dio-1 (B-9): sc-25264. Western blot analysis of Dio-1 expression in non-transfected: sc-117752 (A) and human Dio-1 transfected: sc-159185 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.