

Islet-2 (h): 293 Lysate: sc-113075

BACKGROUND

Islet-2 (insulin gene enhancer protein ISL-2) is a 359 amino acid protein encoded by the human gene ISL2. Islet-2 is a nuclear protein that contains two N-terminal LIM domains, followed by a homeodomain and a serine/glutamine/threonine-rich C-terminus. Islet-2 is a transcriptional factor that defines subclasses of motor neurons that segregate into columns in the spinal cord and select distinct axon pathways. Islet-1 and Islet-2 are initially expressed by all postmitotic spinal motor neurons prior to diversification of somatic and visceral neuronal fates. Somatic, but not visceral, motor neurons maintain Islet-2 expression at later embryonic stages. An early phase of Islet-2 expression by prospective visceral motor neurons of the sympathetic preganglionic motor column is critical for the emergence of complete visceral motor neuron character. Mutations that reduce or eliminate both Islet-1 and Islet-2 activity will result in pronounced defects in visceral motor neuron generation and eroded somatic motor neuron character.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ISL2 (human) mapping to 15q24.3.

PRODUCT

Islet-2 (h): 293 Lysate represents a lysate of human Islet-2 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

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.

APPLICATIONS

Islet-2 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Islet-2 antibodies. Recommended use: 10-20 μ l per lane.

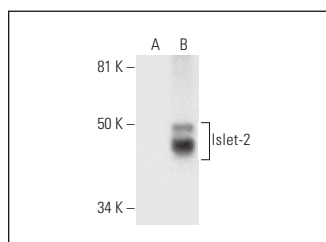
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Islet-2 (A-1): sc-390746 is recommended as a positive control antibody for Western Blot analysis of enhanced human Islet-2 expression in Islet-2 transfected 293 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



Islet-2 (A-1): sc-390746. Western blot analysis of Islet-2 expression in non-transfected: sc-110760 (A) and human Islet-2 transfected: sc-113075 (B) 293 whole cell lysates.

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.