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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
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- Expressversand

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SANTA CRUZ BIOTECHNOLOGY, INC.

Brn-5 (h): 293T Lysate: sc-370001

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Brn family of transcription factors are found in a highly restricted subset of neurons and are critical in the early embryonic development of the central nervous system. Brn-1 and Brn-2 are class III POU (Pit-Oct-Unc) domain proteins, Brn-3 is a class IV POU domain protein and Brn-5 is a class VI POU domain protein. Brn-5 (brain-5), also known as POU6F1, MPOU or TCFB1, is a widely expressed protein, but during embryogenesis is exclusively found in the developing brain and spinal cord. As is characteristic of Brn family members, Brn-5 contains two DNA-binding domains, namely the POU-specific domain and the POU homeodomain, which each contain an HTH (helix-turn-helix) motif. Brn-5 binds to CRH (corticotrophin-releasing hormone) elements with high affinity and is capable of both enhancing Prolactin gene expression and activating Pit-1 expression.

REFERENCES

1. Andersen, B., et al. 1993. Brn-5 is a divergent POU domain factor highly expressed in layer IV of the neocortex. J. Biol. Chem. 268: 23390-23398.
2. Gruber, C.A., et al. 1997. POU domain factors of the Brn-3 class recognize functional DNA elements which are distinctive, symmetrical, and highly conserved in evolution. Mol. Cell. Biol. 17: 2391-2400.
3. Rhee, J.M., et al. 1998. Highly cooperative homodimerization is a conserved property of neural POU proteins. J. Biol. Chem. 273: 34196-34205.
4. Cui, H. and Bulleit, R.F. 1998. Expression of the POU transcription factor Brn-5 is an early event in the terminal differentiation of CNS neurons. J. Neurosci. Res. 52: 625-632.
5. Donahue, L.M. and Reinhart, A.J. 1998. POU domain genes are differentially expressed in the early stages after lineage commitment of the PNS-derived stem cell line, RT4-AC. Brain Res. Dev. Brain Res. 106: 1-12.
6. Cui, H. and Bulleit, R.F. 1998. Potassium chloride inhibits proliferation of cerebellar granule neuron progenitors. Brain Res. Dev. Brain Res. 106: 129-135.
7. Wu, R., et al. 2001. The POU gene Brn-5 is induced by neuregulin and is restricted to myelinating Schwann cells. Mol. Cell. Neurosci. 17: 683-695.
8. Pereira, J.H., et al. 2008. Crystallization and preliminary X-ray analysis of human Brn-5 transcription factor in complex with DNA. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 64: 175-178.
9. Toda, K., et al. 2008. Involvement of mPOU (Brn-5), a class VI POU protein, in the gene expression of Pit-1 as well as PRL. Mol. Cell. Endocrinol. 280: 20-29.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: POU6F1 (human) mapping to 12q13.13.

PRODUCT

Brn-5 (h): 293T Lysate represents a lysate of human Brn-5 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Brn-5 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Brn-5 antibodies. Recommended use: 10-20 µl per lane.

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

RESEARCH USE

For research use only, not for use in diagnostic procedures.