



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



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Diagnostik & molekulare Diagnostik



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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## Brn-3a (h2): 293T Lysate: sc-176370

### BACKGROUND

The Brn family of transcription factors are found in a highly restricted subset of neurons and are critical to the early embryonic development of the central nervous system. Brn-1 and Brn-2 are class III POU (Pit-Oct-Unc) domain proteins, whereas Brn-3 is a class IV POU domain protein. Three Brn-3 proteins have been described and are designated Brn-3a, Brn-3b and Brn-3c. While Brn-3a and Brn-3c stimulate transcription, Brn-3b generally functions as a transcriptional repressor. However, Brn-3b, but not Brn-3a, has been shown to regulate the expression of the acetylcholine receptor. Interestingly, Brn-3a has two functional transactivating domains, one at the amino-terminus and one at the carboxy-terminus. Brn-2 is thought to be involved in smooth muscle cell development and differentiation.

### REFERENCES

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2. Xiang, M., et al. 1993. The gene for Brn-3b: a POU-domain protein expressed in retinal ganglion cells is assigned to the q31.2 region of chromosome 4. *Human Genome Mapping Workshop* 93: 7.
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4. Schonemann, M.D., et al. 1995. Development and survival of the endocrine hypothalamus and posterior pituitary gland requires the neuronal POU domain factor Brn-2. *Genes and Dev.* 9: 3122-3135.
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6. Dawson, S.J., et al. 1996. A single amino acid change converts an inhibitory transcription factor into an activator. *J. Biol. Chem.* 271: 11631-11633.
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8. Gan, L., et al. 1996. POU domain factor Brn-3b is required for the development of a large set of retinal ganglion cells. *Proc. Natl. Acad. Sci. USA* 93: 3920-3925.
9. Suzuki, T., et al. 1996. Preferential differentiation of P19 mouse embryonal carcinoma cells into smooth muscle cells. Use of retinoic acid and anti-sense against the central nervous system-specific POU transcription factor Brn-2. *Circ. Res.* 78: 395-404.

### CHROMOSOMAL LOCATION

Genetic locus: POU4F1 (human) mapping to 13q31.1.

### PRODUCT

Brn-3a (h2): 293T Lysate represents a lysate of human Brn-3a transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

### APPLICATIONS

Brn-3a (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Brn-3a 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.

### 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](http://www.scbt.com) for detailed protocols and support products.