



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

DREAM (h2): 293T Lysate: sc-170935

BACKGROUND

DREAM (for DRE-antagonist modulator) is a Ca^{2+} -regulated transcriptional repressor that specifically binds to the downstream regulatory elements (DRE). DRE is a regulatory sequence that silences basal transcription and is localized to the promoter region of the gene encoding human prodynorphin, an opioid peptide involved in memory acquisition and pain. DREAM forms functional homotetramers that are required for the interaction with the DRE. This association is highly influenced by calcium, as an increase in Ca^{2+} directly inhibits DREAM binding and thereby blocks the repressor activity of DREAM. DREAM transcripts are detected in brain, thymus and thyroid gland, and it is expressed as a nuclear protein. DREAM has been shown to inhibit transcription of other proteins containing DRE-like motifs, including the gene encoding for the AP-1 transcription factor c-Fos, suggesting that DREAM may influence a wide variety of cellular genes.

REFERENCES

1. Morgan, J.I. and Curran, T. 1986. Role of ion flux in the control of c-Fos expression. *Nature* 322: 552-555.
2. Weisskopf, M.G., Zalutsky, R.A. and Nicoll, R.A. 1993. The opioid peptide Dynorphin mediates heterosynaptic depression of hippocampal mossy fibre synapses and modulates long-term potentiation. *Nature* 365: 188.
3. Hurd, Y.L. 1996. Differential messenger RNA expression of prodynorphin and proenkephalin in the human brain. *Neuroscience* 72: 767-783.
4. Carrion, A.M., Mellstrom, B. and Naranjo, J.R. 1998. Protein kinase A-dependent derepression of the human prodynorphin gene via differential binding to an intragenic silencer element. *Mol. Cell. Biol.* 18: 6921-6929.
5. Mandel, G. and Goodman, R.H. 1999. Cell signaling. DREAM on without calcium. *Nature* 398: 29-30.
6. Carrion, A.M., Link, W.A., Ledo, F., Mellstrom, B. and Naranjo, J.R. 1999. DREAM is a Ca^{2+} -regulated transcriptional repressor. *Nature* 398: 80-84.
7. Campos, D., Jiménez-Díaz, L. and Carrión, A.M. 2003. Ca^{2+} -dependent prodynorphin transcriptional derepression in neuroblastoma cells is exerted through DREAM protein activity in a kinase-independent manner. *Mol. Cell. Neurosci.* 22: 135-145.
8. Rivas, M., Mellström, B., Naranjo, J.R. and Santisteban, P. 2004. Transcriptional repressor DREAM interacts with thyroid transcription factor-1 and regulates Thyroglobulin gene expression. *J. Biol. Chem.* 279: 33114-33122.
9. Savignac, M., Pintado, B., Gutierrez-Adan, A., Palczewska, M., Mellström, B. and Naranjo, J.R. et al. 2005. Transcriptional repressor DREAM regulates T-lymphocyte proliferation and cytokine gene expression. *EMBO J.* 24: 3555-3564.

CHROMOSOMAL LOCATION

Genetic locus: KCNIP3 (human) mapping to 2q11.1.

PRODUCT

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

APPLICATIONS

DREAM (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive DREAM 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 $-20^{\circ}C$. 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.