



KChIP4 (h): 293T Lysate: sc-115282

BACKGROUND

The downstream regulatory element, DRE, acts as a location-dependent gene silencer. DREAM (for DRE-antagonist modulator) is a Ca^{2+} -regulated transcriptional repressor that specifically binds to the DRE. DREAM regulates transcription of prodynorphin and c-Fos genes and shows 99% nucleotide homology to the Kv channel-interacting proteins (KChIPs). KChIP family members include KChIP1, which is expressed in brain, KChIP2, which is expressed in heart, brain and lung, KChIP3 (also designated calsenilin), which is expressed in brain and testis and KChIP4.

REFERENCES

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2. Link, W.A., et al. 2004. Day-night changes in downstream regulatory element antagonist modulator/potassium channel interacting protein activity contribute to circadian gene expression in pineal gland. *J. Neurosci.* 24: 5346-5355.
3. Rhodes, K.J., et al. 2004. KChIPs and Kv4 α subunits as integral components of A-type potassium channels in mammalian brain. *J. Neurosci.* 24: 7903-7915.
4. Baranauskas, G. 2004. Cell-type-specific splicing of KChIP4 mRNA correlates with slower kinetics of A-type current. *Eur. J. Neurosci.* 20: 385-391.
5. Lin, Y.L., et al. 2004. Evidence showing an intermolecular interaction between KChIP proteins and Taiwan cobra cardiotoxins. *Biochem. Biophys. Res. Commun.* 319: 720-724.
6. Zhou, W., et al. 2004. Structural insights into the functional interaction of KChIP1 with Shal-type K^+ channels. *Neuron* 41: 573-586.

CHROMOSOMAL LOCATION

Genetic locus: KCNIP4 (human) mapping to 4p15.31.

PRODUCT

KChIP4 (h): 293T Lysate represents a lysate of human KChIP4 transfected 293T cells and is provided as 100 μg protein in 200 μl 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

KChIP4 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive KChIP4 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.

PROTOCOLS

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