



# pki $\alpha$ (m): 293T Lysate: sc-122609

## BACKGROUND

The second messenger cyclic AMP (cAMP) mediates a diverse array of cellular responses such as proliferation, ion transport, regulation of metabolism and gene transcription by activating the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of tetrameric PKA, resulting in the release of two active catalytic subunits. Two forms of a specific PKA inhibitor molecule, designated pki  $\alpha$  and pki  $\beta$ , have been described and are suggested to regulate PKA activity in different portions of the central nervous system. For instance, pki  $\alpha$  is expressed abundantly in the adult mouse brain, particularly in the cerebellum, hypothalamus, hippocampus and cortex. In contrast, pki  $\beta$  is present at a much lower level in most brain regions. pki  $\beta$  is found in significant amounts only in the cerebellum and in a few distinct nuclei within the pons, medulla and hypothalamus.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Pkia (mouse) mapping to 3 A1.

## PRODUCT

pki  $\alpha$  (m): 293T Lysate represents a lysate of mouse pki  $\alpha$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ 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

pki  $\alpha$  (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive pki  $\alpha$  antibodies. Recommended use: 10-20  $\mu$ l 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](http://www.scbt.com) for detailed protocols and support products.