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### Zuschläge

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- Gefahrgutzuschlag
- Expressversand

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# casein kinase I $\alpha$ (m): 293T Lysate: sc-119017

## BACKGROUND

Casein kinase I (also designated CKI) and casein kinase II (CKII) compose a family of serine/threonine protein kinases which are present in all eukaryotes examined to date. Casein kinase I family members, which include casein kinase I $\alpha$ , I $\gamma$ , I $\delta$  and I $\epsilon$ , have been implicated in the control of cytoplasmic and nuclear processes, including DNA replication and repair, membrane trafficking, circadian rhythm, cell cycle progression, chromosome segregation, apoptosis and cellular differentiation. Casein kinase I $\alpha$ , also known as CSNK1A1L, is a 337 amino acid protein that shares a high degree of sequence similarity with the alpha isoform of casein kinase 1. Casein kinase I $\alpha$  resides in the cytoplasm and participates in the Wnt signaling pathway. By utilizing ATP within its protein kinase domain, casein kinase I $\alpha$  phosphorylates a large number of proteins.

## REFERENCES

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2. Tuazon, P.T. and Traugh, J.A. 1991. Casein kinase I and II multipotential serine protein kinases: structure, function, and regulation. *Adv. Second Messenger Phosphoprotein Res.* 23: 123-164.
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4. Graves, P.R., et al. 1993. Molecular cloning, expression, and characterization of a 49-kilodalton casein kinase I isoform from rat testis. *J. Biol. Chem.* 268: 6394-6401.
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6. Fish, K.J., et al. 1995. Isolation and characterization of human casein kinase I $\epsilon$  (CKI), a novel member of the CKI gene family. *J. Biol. Chem.* 270: 14875-14883.
7. Allende, J.E. and Allende, C.C. 1995. Protein kinases. 4. Protein kinase CK2: an enzyme with multiple substrates and a puzzling regulation. *FASEB J.* 9: 313-323.

## CHROMOSOMAL LOCATION

Genetic locus: Csnk1a1 (mouse) mapping to 18 E1.

## PRODUCT

casein kinase I $\alpha$  (m): 293T Lysate represents a lysate of mouse casein kinase I $\alpha$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## 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.

## APPLICATIONS

casein kinase I $\alpha$  (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive casein kinase I $\alpha$  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.