Casein kinase I (also designated CKI) and casein kinase II (also designated CKII) compose a family of serine/threonine protein kinases which are present in all eukaryotes examined to date. CKI family members, which include CKαα, γγ, εε and δδ, have been implicated in the control of cytoplasmic and nuclear processes, including DNA replication and repair. CKII is usually expressed as a tetrameric complex consisting of either an αβ2 or an αααα structure. The αα catalytic subunit is stimulated by the β regulatory subunit, which undergoes autophosphorylation. CKII activity is high in the cytosol and nucleus of proliferating and differentiating cells. CKII is known to phosphorylate more than 100 different substrates including nuclear oncproteins, transcription factors and enzymes involved in DNA metabolism.

**APPLICATIONS**

casein kinase Iβ (E-9) is recommended for detection of casein kinase Iβ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for casein kinase Iβ, casein kinase Iβ siRNA (h): sc-29916, casein kinase Iβ siRNA (m): sc-29917, casein kinase Iβ shRNA Plasmid (h): sc-29916-SH, casein kinase Iβ shRNA Plasmid (m): sc-29917-SH, casein kinase Iβ shRNA (h) Lentiviral Particles: sc-29916-V and casein kinase Iβ shRNA (m) Lentiviral Particles: sc-29917-V.

Molecular Weight of casein kinase Iβ: 28 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, AMJ2-C8 whole cell lysate: sc-364366 or BYDp whole cell lysate: sc-364368.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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