**BACKGROUND**

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 CKIC, γ, e and δ, 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 ααβ2 structure. The α 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. CKI is known to phosphorylate more than 100 different substrates including nuclear oncoproteins, transcription factors and enzymes involved in DNA metabolism.

**CHROMOSOMAL LOCATION**

Genetic locus: CSNK2B (human) mapping to 6p21.33; Csnk2b (mouse) mapping to 17 B1.

**SOURCE**

casein kinase IIβ (6D5) is a mouse monoclonal antibody raised against purified casein kinase IIβ of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

casein kinase IIβ (6D5) is available conjugated to agarose (sc-12739 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-12739 HRP), 200 µg/ml, for WB, HOCl and ELISA; to either phycoerythrin (sc-12739 PE), fluorescein (sc-12739 FITC), Alexa Fluor® 488 (sc-12739 AF488), Alexa Fluor® 546 (sc-12739 AF546), Alexa Fluor® 594 (sc-12739 AF594) or Alexa Fluor® 647 (sc-12739 AF647), 200 µg/ml, for WB (RGB), IF, IHQCl and FCM; and to either Alexa Fluor® 680 (sc-12739 AF680) or Alexa Fluor® 790 (sc-12739 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

casein kinase IIβ (6D5) is recommended for detection of casein kinase IIβ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

casein kinase IIβ (6D5) is also recommended for detection of casein kinase IIβ in additional species, including bovine. Suitable for use as control antibody for casein kinase IIβ siRNA (h): sc-29916, casein kinase IIβ siRNA (m): sc-29917, casein kinase IIβ shRNA Plasmid (h): sc-29916-SH, casein kinase IIβ shRNA Plasmid (m): sc-29917-SH, casein kinase IIβ shRNA (h) Lentiviral Particles: sc-29916-V and casein kinase IIβ shRNA (m) Lentiviral Particles: sc-29917-V.

Molecular Weight of casein kinase IIβ: 28 kDa.

**STORAGE**

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

**DATA**

![Western Blot Analysis of Casein Kinase IIβ Expression](image1.png)

![Immunoperoxidase Staining of Formalin Fixed, Paraffin Embedded Human Adrenal Gland Tissue Showing Nuclear and Cyttoplasmic Staining of Glandular Cells](image2.png)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.