

casein kinase I γ 2 (N-20): sc-18496

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 CKI α , γ , δ and ϵ , 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 α 2 β 2 or an α α' β 2 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. CKII is known to phosphorylate more than 100 different substrates including nuclear oncoproteins, transcription factors and enzymes involved in DNA metabolism.

REFERENCES

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- Graves, P.R., et al. 1993. Molecular cloning, expression, and characterization of a 49 kDa casein kinase I isoform from rat testis. *J. Biol. Chem.* 268: 6394-6401.
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CHROMOSOMAL LOCATION

Genetic locus: CSNK1G2 (human) mapping to 19p13.3; Csnk1g2 (mouse) mapping to 10 C1.

SOURCE

casein kinase I γ 2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of casein kinase I γ 2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-18496 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

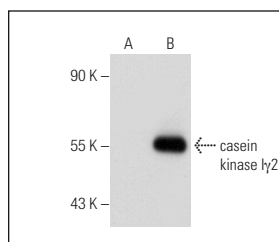
casein kinase I γ 2 (N-20) is recommended for detection of casein kinase I γ 2 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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 I γ 2 siRNA (h): sc-38959, casein kinase I γ 2 siRNA (m): sc-38960, casein kinase I γ 2 shRNA Plasmid (h): sc-38959-SH, casein kinase I γ 2 shRNA Plasmid (m): sc-38960-SH, casein kinase I γ 2 shRNA (h) Lentiviral Particles: sc-38959-V and casein kinase I γ 2 shRNA (m) Lentiviral Particles: sc-38960-V.

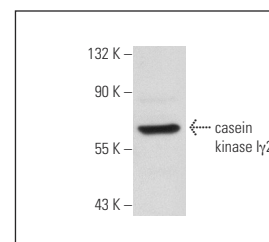
Molecular Weight of casein kinase I γ 2: 70-75 kDa.

Positive Controls: casein kinase I γ 2 (h2): 293T Lysate: sc-172788, HeLa nuclear extract: sc-2120 or K-562 whole cell lysate: sc-2203.

DATA



casein kinase I γ 2 (N-20): sc-18496. Western blot analysis of casein kinase I γ 2 expression in non-transfected: sc-117752 (A) and human casein kinase I γ 2 transfected: sc-172788 (B) 293T whole cell lysates.



casein kinase I γ 2 (N-20): sc-18496. Western blot analysis of casein kinase I γ 2 expression in K-562 whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **casein kinase I γ 2 (F-10): sc-390970** or **casein kinase I γ 2 (26-P): sc-130365**, our highly recommended monoclonal alternatives to casein kinase I γ 2 (N-20).