



CaMKI γ (D-13): sc-103419

BACKGROUND

The Ca²⁺/calmodulin-dependent protein kinases (CaMKs) comprise a structurally related subfamily of serine/threonine kinases. CaMKI γ (calcium/calmodulin-dependent protein kinase I γ), also known as VWS1 or CLICKIII, is a 476 amino acid protein that localizes to both the cytoplasm and to the membrane of the Golgi apparatus and contains one protein kinase domain. Expressed predominately in brain and present at lower levels in spleen, liver, kidney and skeletal muscle, CaMKI γ functions as a Ca²⁺/calmodulin-dependent protein kinase that uses ATP to catalyze the phosphorylation of target proteins, such as the transcription factor CREB-1. CaMKI γ exists as multiple alternatively spliced isoforms and is encoded by a gene which maps to human chromosome 1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CAMK1G (human) mapping to 1q32.2; Camk1g (mouse) mapping to 1 H6.

STORAGE

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

SOURCE

CaMKI γ (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CaMKI γ 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-103419 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CaMKI γ (D-13) is recommended for detection of CaMKI γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 CaMKI γ siRNA (h): sc-88278, CaMKI γ siRNA (m): sc-105179, CaMKI γ shRNA Plasmid (h): sc-88278-SH, CaMKI γ shRNA Plasmid (m): sc-105179-SH, CaMKI γ shRNA (h) Lentiviral Particles: sc-88278-V and CaMKI γ shRNA (m) Lentiviral Particles: sc-105179-V.

Molecular Weight of CaMKI γ : 53 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.