SANTA CRUZ BIOTECHNOLOGY, INC.

CAML (FL-296): sc-13970

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The NFAT (nuclear factor of activated T cells) family of transcription factors regulates cytokine expression in T cells through cis-acting elements located in the promoters of the cytokine genes. The NFAT family consists of the cytoplasmic NFAT (NFATc), transcription factors NFATc1, NFATc2, NFATc3 and NFATc4, and nuclear NFAT (NFATn). Each of these transcription factors plays a role in T cell activation. CAML (calcium-signal modulating cyclophilin ligand) has been identified as an activator of NFAT and NF-IL2A when overexpressed in Jurkat cells. CAML has also been shown to activate calcineurin by causing calcium influx. TACI (*trans*-membrane activator and CAML-interactor), a member of the TNF receptor superfamily, was identified based on its capacity to bind to CAML and has been shown to induce activation of NFAT in the presence of CAML.

CHROMOSOMAL LOCATION

Genetic locus: CAMLG (human) mapping to 5q31.1; Caml (mouse) mapping to 13 B1.

SOURCE

CAML (FL-296) is a rabbit polyclonal antibody raised against amino acids 1-296 representing full length CAML (calcium-modulating cyclophilin ligand) of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

CAML (FL-296) is recommended for detection of CAML 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CAML (FL-296) is also recommended for detection of CAML in additional species, including equine, canine and porcine.

Suitable for use as control antibody for CAML siRNA (h): sc-43659, CAML siRNA (m): sc-44438, CAML shRNA Plasmid (h): sc-43659-SH, CAML shRNA Plasmid (m): sc-44438-SH, CAML shRNA (h) Lentiviral Particles: sc-43659-V and CAML shRNA (m) Lentiviral Particles: sc-44438-V.

Molecular Weight (predicted) of CAML: 33 kDa.

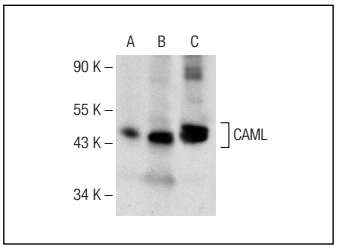
Molecular Weight (observed) of CAML: 37-42 kDa.

Positive Controls: CAML (m): 293T Lysate: sc-118985, Jurkat whole cell lysate: sc-2204 or mouse brain extract: sc-2253.

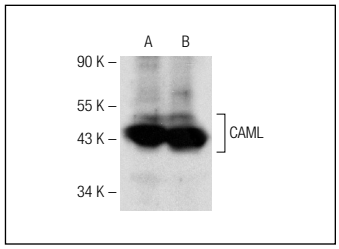
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CAML (FL-296): sc-13970. Western blot analysis of CAML expression in non-transfected: sc-117752 (**A**) and mouse CAML transfected: sc-118985 (**B**) 293T whole cell lysates and mouse brain tissue extract (**C**).



CAML (FL-296): sc-13970. Western blot analysis of CAML expression in Jurkat (**A**) and SK-N-MC (**B**) whole cell lysates.

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.