

# CALML6 (C-19): sc-82793

## BACKGROUND

The level of intracellular calcium is tightly regulated in all eukaryotic cells. A modest increase in this level can result in a myriad of physiological responses, most of which are mediated by calmodulin (CaM), a universal calcium sensor. CaM directly modulates the activity of protein kinases and phosphatases, ion channels and nitric oxide synthetases and is generally involved in such diverse processes as cell proliferation, endocytosis, cellular adhesion, protein turnover and smooth muscle contraction. CALML6 (calmodulin-like 6), also known as CAGLP or CALGP, is a 181 amino acid protein that contains four EF-hand domains and shares functional similarity with CaM. Localized to both the nucleus and the cytoplasm, CALML6 is expressed in heart, prostate, ovary, thymus and bone marrow where it may regulate calcium-related events.

## REFERENCES

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4. Chen, S., Guo, J.H., Saiyin, H., Chen, L., Zhou, G.J., Huang, C.Q. and Yu, L. 2004. Cloning and characterization of human CAGLP gene encoding a novel EF-hand protein. *DNA Seq.* 15: 365-368.
5. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610171. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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7. Swilius, M.T. and Waxham, M.N. 2008. Ca<sup>2+</sup>/calmodulin-dependent protein kinases. *Cell. Mol. Life Sci.* 65: 2637-2657.

## CHROMOSOMAL LOCATION

Genetic locus: CALML6 (human) mapping to 1p36.33.

## SOURCE

CALML6 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CALML6 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.

Blocking peptide available for competition studies, sc-82793 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CALML6 (C-19) is recommended for detection of CALML6 of 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); non cross-reactive with family members CALML3 or CALML5.

CALML6 (C-19) is also recommended for detection of CALML6 in additional species, including canine.

Suitable for use as control antibody for CALML6 siRNA (h): sc-72781, CALML6 shRNA Plasmid (h): sc-72781-SH and CALML6 shRNA (h) Lentiviral Particles: sc-72781-V.

Molecular Weight of CALML6: 21 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](http://www.scbt.com) or our catalog for detailed protocols and support products.