

# CALML5 (H-124): sc-292869

## 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), the universal calcium sensor. CaM directly modulates the activity of protein kinases and phosphatases, ion channels and nitric oxide synthetases. CaM is generally involved in such diverse processes as cell proliferation, endocytosis, cellular adhesion, protein turnover and smooth muscle contraction. CALML5 (calmodulin-like 5), also known as CLSP, is a 146 amino acid protein that contains 4 EF-hand domains and shares functional similarity with CaM. Related to the calmodulin family of calcium binding proteins, CALML5 is a novel calcium binding protein expressed in the epidermis. CALML5 interacts with TGase3 and may be involved in terminal differentiation of keratinocytes.

## REFERENCES

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2. Rhyner, J.A., Koller, M., Durussel-Gerber, I., Cox, J.A. and Strehler, E.E. 1992. Characterization of the human calmodulin-like protein expressed in *Escherichia coli*. *Biochemistry* 31: 12826-12832.
3. Mehul, B., Bernard, D. and Schmidt, R. 2001. Calmodulin-like skin protein: a new marker of keratinocyte differentiation. *J. Invest. Dermatol.* 116: 905-909.
4. Rogers, M.S., Kobayashi, T., Pittelkow, M.R. and Strehler, E.E. 2001. Human calmodulin-like protein is an epithelial-specific protein regulated during keratinocyte differentiation. *Exp. Cell Res.* 267: 216-224.
5. Durussel, I., Méhul, B., Bernard, D., Schmidt, R. and Cox, J.A. 2002. Cation- and peptide-binding properties of human calmodulin-like skin protein. *Biochemistry* 41: 5439-5448.

## CHROMOSOMAL LOCATION

Genetic locus: CALML5 (human) mapping to 10p15.1.

## SOURCE

CALML5 (H-124) is a rabbit polyclonal antibody raised against amino acids 1-124 mapping at the N-terminus of CALML5 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.

## RESEARCH USE

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

## APPLICATIONS

CALML5 (H-124) is recommended for detection of CALML5 of 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); non cross-reactive with other CALML family members.

Suitable for use as control antibody for CALML5 siRNA (h): sc-72779, CALML5 shRNA Plasmid (h): sc-72779-SH and CALML5 shRNA (h) Lentiviral Particles: sc-72779-V.

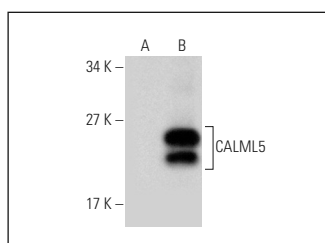
Molecular Weight of CALML5: 16 kDa.

Positive Controls: CALML5 (h2): 293T Lysate: sc-375033.

## 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



CALML5 (H-124): sc-292869. Western blot analysis of CALML5 expression in non-transfected: sc-117752 (A) and human CALML5 transfected: sc-375033 (B) 293T whole cell lysates.

## PROTOCOLS

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Try **CALML5 (A-3): sc-393637** or **CALML5 (1G2): sc-134294**, our highly recommended monoclonal alternatives to CALML5 (H-124).