

# copine I (V-14): sc-85499

## BACKGROUND

Copine I, also known as CPNE1, copine-1, CPN1 or COPN1, is a member of the copine family of evolutionarily conserved, soluble, calcium-dependent, membrane-binding proteins. Members of the copine family are involved in signal transduction and membrane trafficking. Copine I is ubiquitously expressed and contains two N-terminal C2 domains and one C-terminal VWFA (von Willebrand factor A) domain, which is also referred to as the A domain or the core domain. As is characteristic of the copine family, copine I functions in membrane trafficking and is capable of binding phospholipids in a calcium-dependent manner. Copine I is also able to bind liposomes. Via its VWFA domain, copine I directly interacts with the ubiquitin-conjugating enzyme, UBC12, and may play a role in the regulation of TNF $\alpha$ -signaling.

## REFERENCES

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- Jambunathan, N., et al. 2001. A humidity-sensitive *Arabidopsis* copine mutant exhibits precocious cell death and increased disease resistance. *Plant Cell* 13: 2225-2240.
- Cowland, J.B., et al. 2003. Tissue expression of copines and isolation of copines I and III from the cytosol of human neutrophils. *J. Leukoc. Biol.* 74: 379-388.
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- Damer, C.K., et al. 2005. Copine A, a calcium-dependent membrane-binding protein, transiently localizes to the plasma membrane and intracellular vacuoles in *Dictyostelium*. *BMC Cell Biol.* 6: 46.

## CHROMOSOMAL LOCATION

Genetic locus: CPNE1 (human) mapping to 20q11.22; Cpne1 (mouse) mapping to 2 H2.

## SOURCE

copine I (V-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of copine I of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85499 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

copine I (V-14) is recommended for detection of copine I 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).

copine I (V-14) is also recommended for detection of copine I in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for copine I siRNA (h): sc-72972, copine I siRNA (m): sc-142511, copine I shRNA Plasmid (h): sc-72972-SH, copine I shRNA Plasmid (m): sc-142511-SH, copine I shRNA (h) Lentiviral Particles: sc-72972-V and copine I shRNA (m) Lentiviral Particles: sc-142511-V.

Molecular Weight of copine I: 60 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell lysate: sc-2210.

## 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **copine 1 (Z6): sc-101269** or **copine 1/3 (E-8): sc-393249**, our highly recommended monoclonal alternatives to copine 1 (V-14).