# SANTA CRUZ BIOTECHNOLOGY, INC.

# copine 1 (E-18): sc-85497



## 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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- 8. Liu, J., et al. 2005. Transgenic expression of the von Willebrand A domain of the BONZAI 1/copine 1 protein triggers a lesion-mimic phenotype in *Arabidopsis*. Planta 221: 85-94.

## CHROMOSOMAL LOCATION

Genetic locus: CPNE1 (human) mapping to 20q11.22; Cpne1 (mouse) mapping to 2 H1.

## SOURCE

copine 1 (E-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of copine 1 of human origin.

### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

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

Blocking peptide available for competition studies, sc-85497 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

copine 1 (E-18) is recommended for detection of copine 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

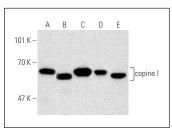
copine 1 (E-18) is also recommended for detection of copine 1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for copine 1 siRNA (h): sc-72972, copine 1 siRNA (m): sc-142511, copine 1 shRNA Plasmid (h): sc-72972-SH, copine 1 shRNA Plasmid (m): sc-142511-SH, copine 1 shRNA (h) Lentiviral Particles: sc-72972-V and copine 1 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.

## DATA



copine I (E-18): sc-85497. Western blot analysis of copine I expression in HeLa (A), NIH/3T3 (B), CCRF-CEM (C), K-562 (D) and LADMAC (E) 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.

MONOS Satisfation Guaranteed

Try copine 1 (Z6): sc-101269 or copine 1/3 (E-8): sc-393249, our highly recommended monoclonal alternatives to copine 1 (E-18).