

# CAP1 (H-61): sc-134637

## BACKGROUND

Cyclase-associated proteins (CAPs) are a family of evolutionary conserved proteins that participate in signal transduction and function to regulate events associated with the Actin cytoskeleton. CAP1 and CAP2 (adenylate cyclase-associated protein 1 and 2, respectively) are two members of the CAP family, both of which localize to the cell membrane and contain one C-CAP/cofactor C-like domain. CAP1 is involved in the regulation of Actin filaments and is thought to mediate processes such as establishment of cell polarity and mRNA localization, while CAP2 has a bifunctional regulatory role and can interact directly with Actin. Although CAP1 is expressed throughout the body, CAP2 is predominately expressed in skin, brain, heart and skeletal muscle. Over-expression of CAP2 is associated with hepatocellular carcinoma, suggesting a possible role for CAP2 in carcinogenesis.

## REFERENCES

- Matviw, H., et al. 1992. Identification of a human cDNA encoding a protein that is structurally and functionally related to the yeast adenylyl cyclase-associated CAP proteins. *Mol. Cell. Biol.* 12: 5033-5040.
- Yu, G., et al. 1994. Comparison of human CAP and CAP2, homologs of the yeast adenylyl cyclase-associated proteins. *J. Cell Sci.* 107: 1671-1678.

## CHROMOSOMAL LOCATION

Genetic locus: CAP1 (human) mapping to 1p34.2; Cap1 (mouse) mapping to 4 D2.2.

## SOURCE

CAP1 (H-61) is a rabbit polyclonal antibody raised against amino acids 14-74 mapping near the N-terminus of CAP1 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.

## APPLICATIONS

CAP1 (H-61) is recommended for detection of CAP1 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).

CAP1 (H-61) is also recommended for detection of CAP1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for CAP1 siRNA (h): sc-88068, CAP1 siRNA (m): sc-142001, CAP1 shRNA Plasmid (h): sc-88068-SH, CAP1 shRNA Plasmid (m): sc-142001-SH, CAP1 shRNA (h) Lentiviral Particles: sc-88068-V and CAP1 shRNA (m) Lentiviral Particles: sc-142001-V.

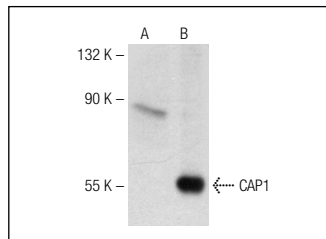
Molecular Weight of CAP1: 52 kDa.

Positive Controls: CAP1 (m): 293T Lysate: sc-113506, HL-60 whole cell lysate: sc-2209 or HeLa whole cell lysate: sc-2200.

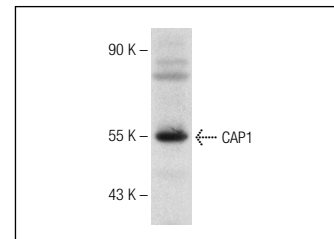
## RECOMMENDED SECONDARY REAGENTS

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



CAP1 (H-61): sc-134637. Western blot analysis of CAP1 expression in non-transfected: sc-117752 (A) and mouse CAP1 transfected: sc-113506 (B) 293T whole cell lysates.



CAP1 (H-61): sc-134637. Western blot analysis of CAP1 expression in HL-60 whole cell lysate.

## 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.


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Try **CAP1 (E-4): sc-376191** or **CAP1 (H-2): sc-376286**, our highly recommended monoclonal alternatives to CAP1 (H-61).