

CAP (P-17): sc-12298



The Power to Question

BACKGROUND

c-Cbl associated protein (CAP), also designated ponsin and SH3P12, interacts with c-Cbl and facilitates the tyrosine phosphorylation of c-Cbl in response to Insulin. CAP contains three adjacent Src homology-3 (SH3) domains in the carboxy terminus. CAP interacts with the focal adhesion kinase p125FAK and colocalizes with actin stress fibers. CAP is expressed in 3T3-L1 adipocytes, but not in 3T3-L1 or NIH-3T3 fibroblasts. Expression of the CAP gene is stimulated by thiazolidinediones (TZDs) through activation of PPAR γ . In addition to its interaction with c-Cbl, CAP interacts with Sos through the same SH3 domain. CAP may facilitate protein-protein associations involved in cell structural changes.

REFERENCES

- Ribon, V., Printen, J.A., Hoffman, N.G., Kay, B.K. and Saltiel, A.R. 1998. A novel, multifunctional c-Cbl binding protein in Insulin receptor signaling in 2T3-L1 adipocytes. *Mol. Cell. Biol.* 18: 872-879.
- Ribon, V., Herrera, R., Kay, B.K. and Saltiel, A.R. 1998. A role for CAP, a novel, multifunctional Src homology 3 domain-containing protein in formation of actin stress fibers and focal adhesions. *J. Biol. Chem.* 273: 4073-4080.
- Ribon, V., Johnson, J.H., Camp, H.S. and Saltiel, A.R. 1998. Thiazolidinediones and Insulin resistance: peroxisome proliferator activated receptor γ activation stimulates expression of the CAP gene. *Proc. Natl. Acad. Sci. USA* 95: 14751-14756.
- Kurakin, A., Hoffman, N.G. and Kay, B.K. 1998. Molecular recognition properties of the C-terminal Sh3 domain of the Cbl associated protein, CAP. *J. Pept. Res.* 52: 331-337.
- Baumann, C., Chokshi, N., Saltiel, A.R. and Ribon, V. 2000. Cloning and characterization of a functional peroxisome proliferator activator receptor- γ -responsive element in the promoter of the CAP gene. *J. Biol. Chem.* 275: 9131-9135.

CHROMOSOMAL LOCATION

Genetic locus: Sorbs1 (mouse) mapping to 19 C3.

SOURCE

CAP (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CAP of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12298 P, (100 μ g 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

CAP (P-17) is recommended for detection of CAP of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

CAP (P-17) is also recommended for detection of CAP in additional species, including equine, canine and porcine.

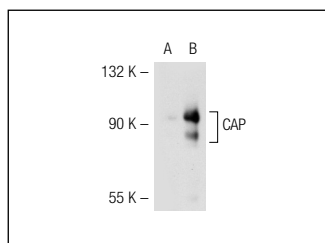
Suitable for use as control antibody for CAP siRNA (m): sc-40340, CAP shRNA Plasmid (m): sc-40340-SH and CAP shRNA (m) Lentiviral Particles: sc-40340-V.

Positive Controls: CAP (m): 293T Lysate: sc-118986.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CAP (P-17): sc-12298. Western blot analysis of CAP expression in non-transfected: sc-117752 (A) and mouse CAP transfected: sc-118986 (B) 293T whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **CAP (G-3): sc-166903**, our highly recommended monoclonal alternative to CAP (P-17).