

# Caper (H-103): sc-135207

## BACKGROUND

Caper, also known as splicing factor HCC1 or hepatocellular carcinoma protein 1 and RNA binding region containing protein 2 (RNPC2), acts as a transcriptional coactivator for steroid nuclear receptors JUN/AP-1, ESR1/ER- $\alpha$  and ESR2/ER- $\beta$ . It is a nuclear protein with highest concentrations in nuclear speckles and plays a role in the pre-mRNA splicing process. Two isoforms of Caper, HCC1.3 and HCC1.4, colocalize with pre-mRNA splicing factor SC35 and uridine-rich small nuclear RNAs. Caper is a widely expressed protein with highest levels detected in skeletal muscle, lung, brain and pancreas.

## REFERENCES

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2. Jung, D.J., et al. 2002. Molecular cloning and characterization of Caper, a novel coactivator of activating protein 1 and estrogen receptors. *J. Biol. Chem.* 277: 1229-1234.
3. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604739. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Cazalla, D., et al. 2005. A novel SR-related protein is required for the second step of pre-mRNA splicing. *Mol. Cell. Biol.* 25: 2969-2980.
5. Dowhan, D.H., et al. 2005. Steroid hormone receptor coactivation and alternative RNA splicing by U2AF65-related proteins Caper $\alpha$  and Caper $\beta$ . *Mol. Cell* 17: 429-439.
6. Stratil, A., et al. 2007. Mapping of the porcine FBN2, YWHAQ, CNN3, DCN, POSTN, SPARC, RBM39 and GNAS genes, expressed in foetal skeletal muscles. *Anim. Genet.* 39: 204-205.

## CHROMOSOMAL LOCATION

Genetic locus: RBM39 (human) mapping to 20q11.22; Rbm39 (mouse) mapping to 2 H1.

## SOURCE

Caper (H-103) is a rabbit polyclonal antibody raised against amino acids 428-530 mapping at the C-terminus of Caper of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

Caper (H-103) is recommended for detection of Caper 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).

Caper (H-103) is also recommended for detection of Caper in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Caper siRNA (h): sc-60322, Caper siRNA (m): sc-60323, Caper shRNA Plasmid (h): sc-60322-SH, Caper shRNA Plasmid (m): sc-60323-SH, Caper shRNA (h) Lentiviral Particles: sc-60322-V and Caper shRNA (m) Lentiviral Particles: sc-60323-V.

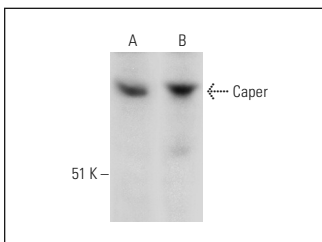
Molecular Weight of Caper: 64 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or HL-60 nuclear extract: sc-2147.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



Caper (H-103): sc-135207. Western blot analysis of Caper expression in HeLa (A) and HL-60 (B) nuclear extracts.

## RESEARCH USE

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



Try **Caper (G-10): sc-376531** or **Caper (P14): sc-101103**, our highly recommended monoclonal alternatives to Caper (H-103).