SANTA CRUZ BIOTECHNOLOGY, INC.

Caper (G-10): sc-376531

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 c-Jun, ERα and ER-β. Caper, a nuclear protein with highest concentrations in nuclear speckles, plays a role in the pre-mRNA splicing process. Two isoforms of Caper, HCC1.3 and HCC1.4, co-localize 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.

CHROMOSOMAL LOCATION

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

SOURCE

Caper (G-10) is a mouse monoclonal antibody raised against amino acids 428-530 mapping at the C-terminus of Caper of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Caper (G-10) is available conjugated to agarose (sc-376531 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376531 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376531 PE), fluorescein (sc-376531 FITC), Alexa Fluor® 488 (sc-376531 AF488), Alexa Fluor® 546 (sc-376531 AF546), Alexa Fluor® 594 (sc-376531 AF594) or Alexa Fluor® 647 (sc-376531 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376531 AF680) or Alexa Fluor® 790 (sc-376531 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Caper (G-10) is recommended for detection of Caper of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Caper (G-10) is also recommended for detection of Caper in additional species, including equine, canine, bovine and porcine.

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.

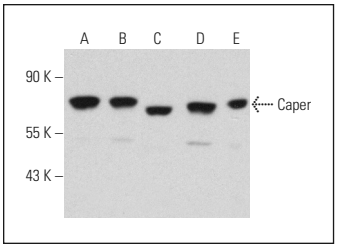
Molecular Weight of Caper: 64 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, F9 cell lysate: sc-2245 or Hep G2 cell lysate: sc-2227.

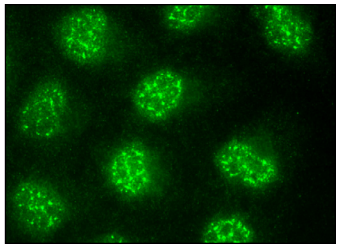
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Caper (G-10): sc-376531. Western blot analysis of Caper expression in HeLa (**A**), Hep G2 (**B**), NIH/3T3 (**C**), F9 (**D**) and NRK (**E**) whole cell lysates.



Caper (G-10): sc-376531. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Uehara, T., et al. 2017. Selective degradation of splicing factor CAPERα by anticancer sulfonamides. Nat. Chem. Biol. 13: 675-680.
2. Mayor-Ruiz, C., et al. 2019. Plasticity of the Cullin-RING ligase repertoire shapes sensitivity to ligand-induced protein degradation. Mol. Cell 75: 849-858.e8.
3. Mayor-Ruiz, C., et al. 2020. Rational discovery of molecular glue degraders via scalable chemical profiling. Nat. Chem. Biol. 16: 1199-1207.
4. Kim, S.A., et al. 2020. Aryl sulfonamides induce degradation of aryl hydrocarbon receptor nuclear translocator through $CRL4^{DCAF15}$ E3 ligase. Mol. Cells 43: 935-944.
5. Hülskamp, M.D., et al. 2021. The small-molecule protein ligand interface stabiliser E7820 induces differential cell line specific responses of Integrin α2 expression. BMC Cancer 21: 571.

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 for detailed protocols and support products.