SANTA CRUZ BIOTECHNOLOGY, INC.

YAP (G-6): sc-376830

BACKGROUND

The Yes-associated protein, otherwise known as YAP, is a 14-3-3-binding molecule that was originally recognized by virtue of its ability to bind to the SH3 domain of Yes. The binding of YAP to 14-3-3 requires the phosphorylation of a homologous serine residue (Ser 112) in the YAP 14-3-3-binding motif. The highly conserved and ubiquitously expressed 14-3-3 proteins regulate differentiation, cell cycle progression and apoptosis by binding intracellular phosphoproteins involved in signal transduction. YAP may link events at the plasma membrane and cytoskeleton to inhibition of transcription in the nucleus in a manner regulated by 14-3-3 proteins. YAP shares homology with the WW domain of TAZ, transcriptional co-activator with PDZ-binding motif, which functions as a transcriptional co-activator by binding to the PPXY motif present in transcription factors. YAP is expressed at high levels in the lung, placenta, prostate, ovary and testis.

REFERENCE

1. Sudol, M., et al. 1995. Characterization of the mammalian YAP (Yes-associated protein) gene and its role in defining a novel protein module, the WW domain. J. Biol. Chem. 270: 14733-14741.
2. Basu, S., et al. 2003. Akt phosphorylates the Yes-associated protein, YAP, to induce interaction with 14-3-3 and attenuation of p73-mediated apoptosis. Mol. Cell 11: 11-23.
3. Danovi, S.A., et al. 2008. Yes-associated protein (YAP) is a critical mediator of c-Jun-dependent apoptosis. Cell Death Differ. 15: 217-219.

CHROMOSOMAL LOCATION

Genetic locus: YAP1 (human) mapping to 11q13.1; Yap1 (mouse) mapping to 9 A1.

SOURCE

YAP (G-6) is a mouse monoclonal antibody raised against amino acids 206-330 mapping near the C-terminus of YAP 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376830 X, 200 µg/0.1 ml.

YAP (G-6) is available conjugated to agarose (sc-376830 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376830 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376830 PE), fluorescein (sc-376830 FITC), Alexa Fluor® 488 (sc-376830 AF488), Alexa Fluor® 546 (sc-376830 AF546), Alexa Fluor® 594 (sc-376830 AF594) or Alexa Fluor® 647 (sc-376830 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376830 AF680) or Alexa Fluor® 790 (sc-376830 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

YAP (G-6) is recommended for detection of YAP 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

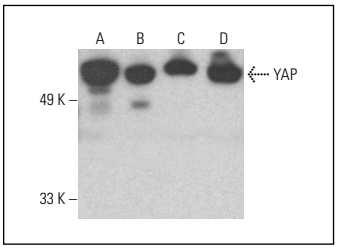
Suitable for use as control antibody for YAP siRNA (h): sc-38637, YAP siRNA (m): sc-38638, YAP shRNA Plasmid (h): sc-38637-SH, YAP shRNA Plasmid (m): sc-38638-SH, YAP shRNA (h) Lentiviral Particles: sc-38637-V and YAP shRNA (m) Lentiviral Particles: sc-38638-V.

YAP (G-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

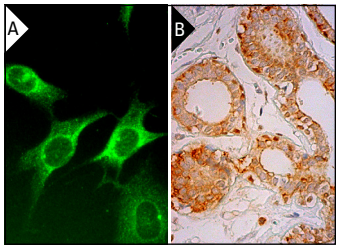
Molecular Weight of YAP: 65 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

DATA



YAP (G-6) HRP: sc-376830 HRP. Direct western blot analysis of YAP expression in HeLa nuclear extract (**A**) and Hep G2 (**B**), AT-3 (**C**) and HeLa (**D**) whole cell lysates.



YAP (G-6): sc-376830. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing cytoplasmic staining of glandular cells and nuclear and cytoplasmic staining of myoepithelial cells (**B**).

SELECT PRODUCT CITATIONS

1. Yuan, Y., et al. 2016. YAP overexpression promotes the epithelial-mesenchymal transition and chemoresistance in pancreatic cancer cells. Mol. Med. Rep. 13: 237-242.
2. Gao, Y., et al. 2021. Autophagy inhibition facilitates wound closure partially dependent on the YAP/IL-33 signaling in a mouse model of skin wound healing. FASEB J. 35: e21920.
3. Guo, Y., et al. 2022. CK2-induced cooperation of HHEX with the YAP-TEAD4 complex promotes colorectal tumorigenesis. Nat. Commun. 13: 4995.
4. Tocci, P., et al. 2023. Targeting tumor-stroma communication by blocking endothelin-1 receptors sensitizes high-grade serous ovarian cancer to PARP inhibition. Cell Death Dis. 14: 5.

RESEARCH USE

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