SANTA CRUZ BIOTECHNOLOGY, INC.

YAP (B-8): sc-398182

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.

CHROMOSOMAL LOCATION

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

SOURCE

YAP (B-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 294-323 within an internal region of YAP of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} 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-398182 X, 200 µg/0.1 ml.

YAP (B-8) is available conjugated to agarose (sc-398182 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398182 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398182 PE), fluorescein (sc-398182 FITC), Alexa Fluor® 488 (sc-398182 AF488), Alexa Fluor® 546 (sc-398182 AF546), Alexa Fluor® 594 (sc-398182 AF594) or Alexa Fluor® 647 (sc-398182 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398182 AF680) or Alexa Fluor® 790 (sc-398182 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398182 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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.

APPLICATIONS

YAP (B-8) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

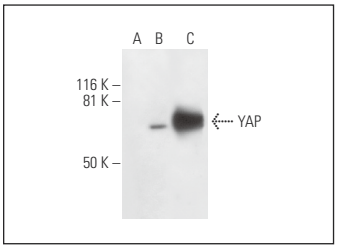
Suitable for use as control antibody for YAP siRNA (h): sc-38637, YAP siRNA (m): sc-38638, YAP shRNA Plasmid (h): sc-38637-SH, YAP shRNA Plasmid (m): sc-38638-SH, YAP shRNA (h) Lentiviral Particles: sc-38637-V and YAP shRNA (m) Lentiviral Particles: sc-38638-V.

YAP (B-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of YAP: 65 kDa.

Positive Controls: YAP (h): 293T Lysate: sc-115429 or Caco-2 cell lysate: sc-2262.

DATA



YAP (B-8): sc-398182. Western blot analysis of YAP expression in non-transfected 293T: sc-117752 (**A**), human YAP transfected 293T: sc-115429 (**B**) and Caco-2 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Du, Y.E., et al. 2017. MiR-205/YAP1 in activated fibroblasts of breast tumor promotes VEGF-independent angiogenesis through Stat3 signaling. Theranostics 7: 3972-3988.
2. Gegenfurtner, F.A., et al. 2018. Transcriptional effects of Actin-binding compounds: the cytoplasm sets the tone. Cell. Mol. Life Sci. 75: 4539-4555.
3. Li, L., et al. 2019. Nanotopography on titanium promotes osteogenesis via autophagy-mediated signaling between YAP and β-catenin. Acta Biomater. 96: 674-685.
4. Wang, Y., et al. 2019. Hippo kinases regulate cell junctions to inhibit tumor metastasis in response to oxidative stress. Redox Biol. 26: 101233.
5. Jebeli, M., et al. 2023. Multicellular aligned bands disrupt global collective cell behavior. Acta Biomater. 163: 117-130.

RESEARCH USE

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