YAP (H-125): sc-15407



The Power to Question

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 (H-125) is a rabbit polyclonal antibody raised against amino acids 206-330 mapping near the C-terminus of YAP of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15407 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

YAP (H-125) is recommended for detection of YAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

YAP (H-125) is also recommended for detection of YAP in additional species, including avian.

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 (H-125) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

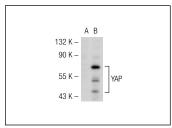
Molecular Weight of YAP: 65 kDa.

Positive Controls: YAP (m2): 293T Lysate: sc-124676, PC-3 cell lysate: sc-2220 or HeLa nuclear extract: sc-2120.

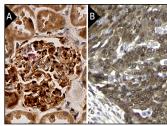
STORAGE

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

DATA



YAP (H-125): sc-15407. Western blot analysis of YAP expression in non-transfected: sc-117752 (A) and mouse YAP transfected: sc-124676 (B) 293T whole cell Ivsates



YAP (H-125): sc-15407. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and nuclear staining of cells in glomeruli and tubules [A]. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovarian cancer tissue showing nuclear and cytoplasmic staining of tumor cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program [B].

SELECT PRODUCT CITATIONS

- Zender, L., et al. 2006. Identification and validation of oncogenes in liver cancer using an integrative oncogenomic approach. Cell 125: 1253-1267.
- Hoshino, M., et al. 2006. Transcriptional repression induces a slowly progressive atypical neuronal death associated with changes of YAP isoforms and p73. J. Cell Biol. 172: 589-604.
- Zhang, L., et al. 2011. Yes-associated protein promotes cell proliferation by activating Fos Related Activator-1 in oral squamous cell carcinoma. Oral Oncol. 47: 693-697.
- Xu, M.Z., et al. 2011. AXL receptor kinase is a mediator of YAP-dependent oncogenic functions in hepatocellular carcinoma. Oncogene 30: 1229-1240.
- Dong, A., et al. 2011. The human adenocarcinoma-associated gene, AGR2, induces expression of amphiregulin through Hippo pathway co-activator YAP1 activation. J. Biol. Chem. 286: 18301-18310.
- Zhao, B., et al. 2012. Cell detachment activates the Hippo pathway via cytoskeleton reorganization to induce anoikis. Genes Dev. 26: 54-68.
- 7. Yu, F.X., et al. 2012. Regulation of the Hippo-YAP pathway by G protein-coupled receptor signaling. Cell 150: 780-791.

RESEARCH USE

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

MONOS Satisfation Guaranteed Try YAP (G-6): sc-376830 or YAP (H-9): sc-271134, our highly recommended monoclonal alternatives to YAP (H-125). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see YAP (G-6): sc-376830.