

Goat Anti-YAP1 Antibody

Peptide-affinity purified goat antibody Catalog # AF2205a

Specification

Goat Anti-YAP1 Antibody - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB P46937 NP_006097, 10413, 22601 (mouse), 363014 (rat) Dog Human, Mouse, Rat Goat Polyclonal 100ug/200ul IgG 54462

Goat Anti-YAP1 Antibody - Additional Information

Gene ID 10413

Other Names

Transcriptional coactivator YAP1, Yes-associated protein 1, Protein yorkie homolog, Yes-associated protein YAP65 homolog, YAP1, YAP65

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat Anti-YAP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-YAP1 Antibody - Protein Information

Name YAP1

Synonyms YAP65

Function

Transcriptional regulator which can act both as a coactivator and a corepressor and is the critical downstream regulatory target in the Hippo signaling pathway that plays a pivotal role in organ size



control and tumor suppression by restricting proliferation and promoting apoptosis (PubMed:17974916, PubMed:18280240, PubMed:18280240, PubMed:138579750, PubMed:21364637, PubMed:21364637, PubMed:30447097). The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ (PubMed:<a href="http://www.uniprot.org/citations/18158288"

target="_blank">18158288). Plays a key role in tissue tension and 3D tissue shape by regulating cortical actomyosin network formation. Acts via ARHGAP18, a Rho GTPase activating protein that suppresses F-actin polymerization (PubMed:25778702). Plays a key role in controlling cell proliferation in response to cell contact. Phosphorylation of YAP1 by LATS1/2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration (PubMed:18158288). The presence of TEAD transcription factors are required for it to stimulate gene expression, cell growth, anchorage- independent growth, and epithelial mesenchymal transition (EMT) induction (PubMed:18579750). Suppresses ciliogenesis via acting as a transcriptional corepressor of the TEAD4 target genes AURKA and PLK1 (PubMed:25849865). In conjunction with WWTR1, involved in the regulation of TGFB1-dependent SMAD2 and SMAD3 nuclear accumulation (By similarity).

Cellular Location

Cytoplasm. Nucleus. Cell junction {ECO:0000250|UniProtKB:P46938}. Note=Both phosphorylation and cell density can regulate its subcellular localization (PubMed:18158288, PubMed:20048001). Phosphorylation sequesters it in the cytoplasm by inhibiting its translocation into the nucleus (PubMed:18158288, PubMed:20048001). At low density, predominantly nuclear and is translocated to the cytoplasm at high density (PubMed:18158288, PubMed:20048001, PubMed:25849865). PTPN14 induces translocation from the nucleus to the cytoplasm (PubMed:22525271). Localized mainly to the nucleus in the early stages of embryo development with expression becoming evident in the cytoplasm at the blastocyst and epiblast stages (By similarity). {ECO:0000250|UniProtKB:P46938, ECO:0000269|PubMed:18158288, ECO:0000269|PubMed:20048001, ECO:0000269|PubMed:22525271, ECO:0000269|PubMed:25849865}

Tissue Location

Increased expression seen in some liver and prostate cancers. Isoforms lacking the transactivation domain found in striatal neurons of patients with Huntington disease (at protein level).

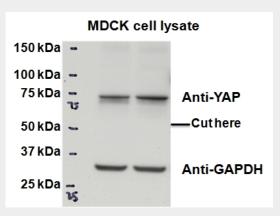
Goat Anti-YAP1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



Goat Anti-YAP1 Antibody - Images



AF2205a (0.5 μ g/ml) staining of MDCK lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-YAP1 Antibody - Background

This gene encodes the human ortholog of chicken YAP protein which binds to the SH3 domain of the Yes proto-oncogene product. This protein contains a WW domain that is found in various structural, regulatory and signaling molecules in yeast, nematode, and mammals, and may be involved in protein-protein interaction.

Goat Anti-YAP1 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

MicroRNA-375 targets Hippo-signaling effector YAP in liver cancer and inhibits tumor properties. Liu AM, et al. Biochem Biophys Res Commun, 2010 Apr 9. PMID 20226166.

Overexpression of yes-associated protein contributes to progression and poor prognosis of non-small-cell lung cancer. Wang Y, et al. Cancer Sci, 2010 May. PMID 20219076.

Yap is a novel regulator of C2C12 myogenesis. Watt KI, et al. Biochem Biophys Res Commun, 2010 Mar 19. PMID 20153295.

A coordinated phosphorylation by Lats and CK1 regulates YAP stability through SCF(beta-TRCP). Zhao B, et al. Genes Dev, 2010 Jan 1. PMID 20048001.