

Goat Anti-YAP1 Antibody

Peptide-affinity purified goat antibody Catalog # AF2205a

Specification

Goat Anti-YAP1 Antibody - Product Information

Application WB **Primary Accession** P46937

Other Accession NP 006097, 10413, 22601 (mouse), 363014

Reactivity Dog

Predicted Human, Mouse, Rat

Host Goat Clonality **Polyclonal** Concentration 100ug/200ul

Isotype laG Calculated MW 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

0.5 mg lgG/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 (<u>HGNC:16262</u>)

Synonyms YAP65

Function

Transcriptional regulator with dual roles as a coactivator and corepressor. Critical downstream regulatory target in the Hippo signaling pathway, crucial for organ size control and tumor



Tel: 858.875.1900 Fax: 858.875.1999

suppression by restricting proliferation and promoting apoptosis (PubMed: 17974916, PubMed:18280240, PubMed:18579750, PubMed:21364637, PubMed:30447097). The Hippo signaling pathway core involves a kinase cascade featuring STK3/MST2 and STK4/MST1, along with its regulatory partner SAV1, which phosphorylates and activates LATS1/2 in complex with their regulatory protein, MOB1. This activation leads to the phosphorylation and inactivation of the YAP1 oncoprotein and WWTR1/TAZ (PubMed:18158288). Phosphorylation of YAP1 by LATS1/2 prevents its nuclear translocation, thereby regulating the expression of its target genes (PubMed:18158288). The transcriptional regulation of gene expression requires TEAD transcription factors and modulates cell growth, anchorage-independent growth, and induction of epithelial-mesenchymal transition (EMT) (PubMed:18579750). Plays a key role in tissue tension and 3D tissue shape by regulating the cortical actomyosin network, acting via ARHGAP18, a Rho GTPase activating protein that suppresses F- actin polymerization (PubMed:25778702). It also suppresses ciliogenesis by acting as a transcriptional corepressor of TEAD4 target genes AURKA and PLK1 (PubMed:25849865). In conjunction with WWTR1, regulates TGFB1- dependent SMAD2 and SMAD3 nuclear accumulation (By similarity). Synergizes with WBP2 to enhance PGR activity (PubMed: 16772533).

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). In the nucleus, phosphorylation by PRP4K induces nuclear exclusion (PubMed:29695716) 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, ECO:0000269|PubMed:29695716}

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

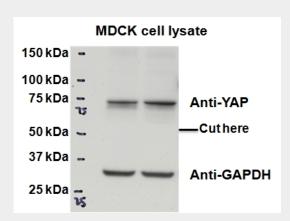
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



- Flow Cytomety
- Cell Culture

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.