

Anti-YAP1 Picoband Antibody
Catalog # ABO12652**Specification**

Anti-YAP1 Picoband Antibody - Product Information

Application	WB
Primary Accession	P46937
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Transcriptional coactivator YAP1(YAP1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-YAP1 Picoband 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

Calculated MW

54462 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm . Nucleus . Both phosphorylation and cell density can regulate its subcellular localization. Phosphorylation sequesters it in the cytoplasm by inhibiting its translocation into the nucleus. At low density, predominantly nuclear and is translocated to the cytoplasm at high density (PubMed:18158288, PubMed:20048001). PTPN14 induces translocation from the nucleus to the cytoplasm (PubMed:22525271). .

Tissue Specificity

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). .

Protein Name

Transcriptional coactivator YAP1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human YAP1 (62-97aa ETDLLEALFNAVMNPKTANVPQTVPMRLRKLPDSFFK), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-YAP1 Picoband 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: 18579750, 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: 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 TGFβ1-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

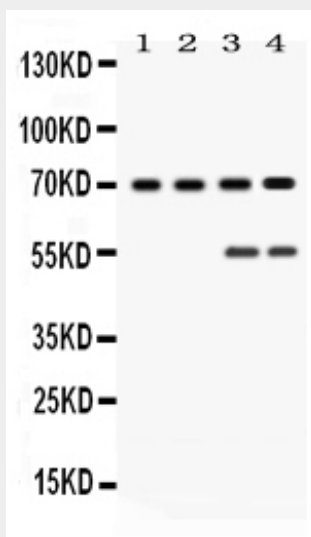
Increased expression seen in some liver and prostate cancers. Isoforms lacking the transactivation domain found in striatal neurons of patients with Huntington disease (at protein level).

Anti-YAP1 Picoband 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 Cytometry](#)
- [Cell Culture](#)

Anti-YAP1 Picoband Antibody - Images



Western blot analysis of YAP1 expression in rat testis extract (lane 1), mouse ovary extract (lane 2), HELA whole cell lysates (lane 3) and MCF-7 whole cell lysates (lane 4). YAP1 at 54KD; 70KD was detected using rabbit anti-YAP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12652) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method.

Anti-YAP1 Picoband Antibody - Background

YAP1, also known as YAP or YAP65, is a potent oncogene, which is amplified in various human cancers. This gene encodes a downstream nuclear effector of the Hippo signaling pathway which is

involved in development, growth, repair, and homeostasis. It is known to play a role in the development and progression of multiple cancers as a transcriptional regulator of this signaling pathway and may function as a potential target for cancer treatment. Alternative splicing results in multiple transcript variants encoding different isoforms.