

#### **YAP1** Antibody

Rabbit Polyclonal Antibody Catalog # ABV10629

# **Specification**

## **YAP1 Antibody - Product Information**

Application WB
Primary Accession P46937
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 54462

# **YAP1** Antibody - Additional Information

**Gene ID** 10413

Application & Usage Western blotting (0.5-4 μg/ml). Jurkat cell

lysate can be used as a positive control. Other applications have not been tested.

**Other Names** 

YAP-1, YAP1, YAP 1, Yes associated protein 1, YAP65, YAP 65

Target/Specificity

YAP

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

### **Formulation**

 $100 \mu g$  (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

### **Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

#### **Precautions**

YAP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



## **YAP1** Antibody - Protein Information

mesenchymal transition (EMT) induction (PubMed:<a

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: <a href="http://www.uniprot.org/citations/17974916" target=" blank">17974916</a>, PubMed:<a href="http://www.uniprot.org/citations/18280240" target=" blank">18280240</a>, PubMed:<a href="http://www.uniprot.org/citations/18579750" target="blank">18579750</a>, PubMed:<a href="http://www.uniprot.org/citations/21364637" target="blank">21364637</a>, PubMed:<a href="http://www.uniprot.org/citations/30447097" target="blank">30447097</a>). 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</a>). 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: <a href="http://www.uniprot.org/citations/25778702" target=" blank">25778702</a>). 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: <a href="http://www.uniprot.org/citations/18158288" target=" blank">18158288</a>). The presence of TEAD transcription factors are required for it to stimulate gene expression, cell growth, anchorage- independent growth, and epithelial

href="http://www.uniprot.org/citations/18579750" target="\_blank">18579750</a>). Suppresses ciliogenesis via acting as a transcriptional corepressor of the TEAD4 target genes AURKA and PLK1 (PubMed:<a href="http://www.uniprot.org/citations/25849865" target="\_blank">25849865</a>). 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: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).

### **YAP1 Antibody - Protocols**

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



Tel: 858.875.1900 Fax: 858.875.1999



- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# YAP1 Antibody - Images

# YAP1 Antibody - Background

Yes-associated protein (YAP) was identified based on its ability to associate with the SH3 domain of Yes. It also binds to other SH3 domain containing proteins such as Nck, Crk, Src, and Abl. YAP is a transcriptional coactivator. It interacts with 13-3-3 and suppresses apoptosis.