

Anti-YAP1/Yap Rabbit Monoclonal Antibody
Catalog # ABO13365**Specification****Anti-YAP1/Yap Rabbit Monoclonal Antibody - Product Information**

| | |
|-------------------|--------------------------|
| Application | WB, IHC, IF, ICC, IP, FC |
| Primary Accession | P46937 |
| Host | Rabbit |
| Isotype | Rabbit IgG |
| Reactivity | Human |
| Clonality | Monoclonal |
| Format | Liquid |

Description

Anti-YAP1/Yap Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human.

Anti-YAP1/Yap Rabbit Monoclonal Antibody - Additional Information

Gene ID 10413

Other Names

Transcriptional coactivator YAP1, Yes-associated protein 1, Protein yorkie homolog, Yes-associated protein YAP65 homolog, YAP1 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=16262 target="_blank">HGNC:16262), YAP65

Calculated MW

54462 MW KDa

Application Details

WB 1:5000-1:10000
IHC 1:50-1:100
ICC/IF 1:50-1:100
IP 1:50
FC 1:50

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)..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human YAP1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-YAP1/Yap Rabbit Monoclonal Antibody - Protein Information

Name YAP1 ([HGNC:16262](#))

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 suppression by restricting proliferation and promoting apoptosis (PubMed:[17974916](http://www.uniprot.org/citations/17974916), PubMed:[18280240](http://www.uniprot.org/citations/18280240), PubMed:[18579750](http://www.uniprot.org/citations/18579750), PubMed:[21364637](http://www.uniprot.org/citations/21364637), PubMed:[30447097](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/18158288)). Phosphorylation of YAP1 by LATS1/2 prevents its nuclear translocation, thereby regulating the expression of its target genes (PubMed:[18158288](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25778702)). It also suppresses ciliogenesis by acting as a transcriptional corepressor of TEAD4 target genes AURKA and PLK1 (PubMed:[25849865](http://www.uniprot.org/citations/25849865)). In conjunction with WWTR1, regulates TGFβ1- dependent SMAD2 and SMAD3 nuclear accumulation (By similarity). Synergizes with WBP2 to enhance PGR activity (PubMed:[16772533](http://www.uniprot.org/citations/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

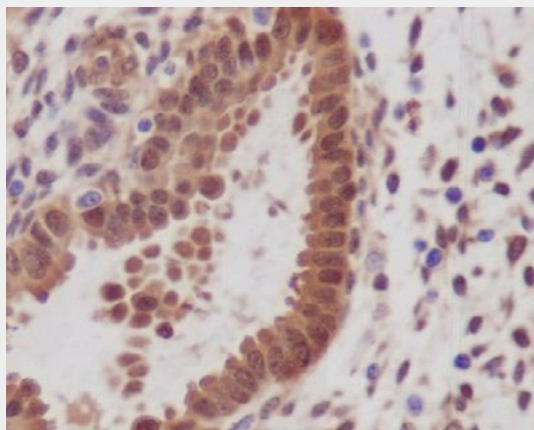
Increased expression seen in some liver and prostate cancers. Isoforms lacking the transactivation domain found in striatal neurons of patients with Huntington disease (at protein level).

Anti-YAP1/ Yap Rabbit Monoclonal Antibody - Protocols

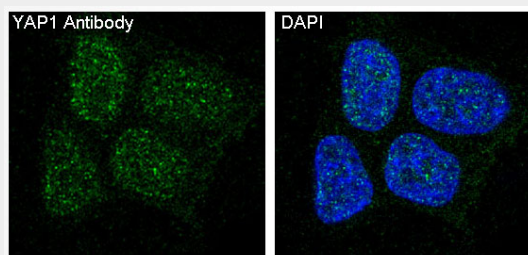
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

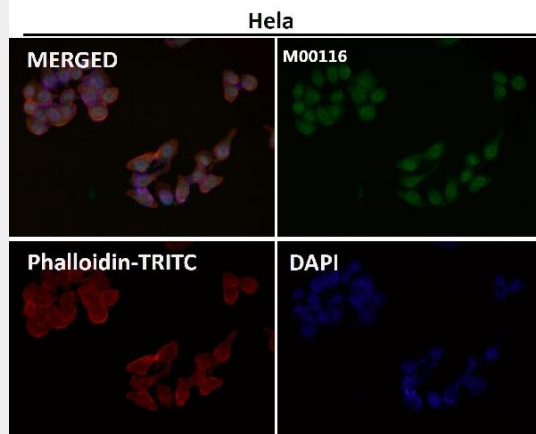
Anti-YAP1/ Yap Rabbit Monoclonal Antibody - Images



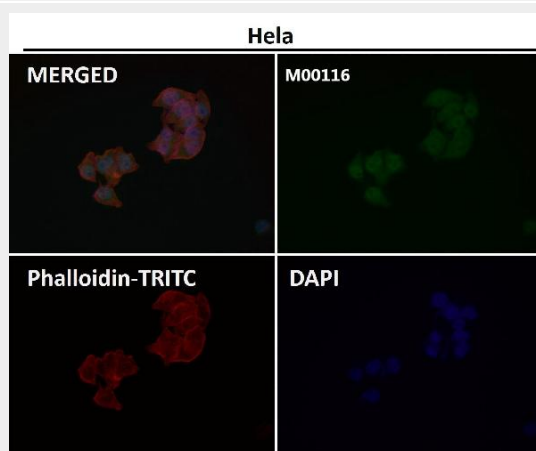
Immunohistochemical analysis of paraffin-embedded human uterus, using YAP1 Antibody.



Immunofluorescent analysis of MCF7 cells, using YAP1 Antibody .



Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.

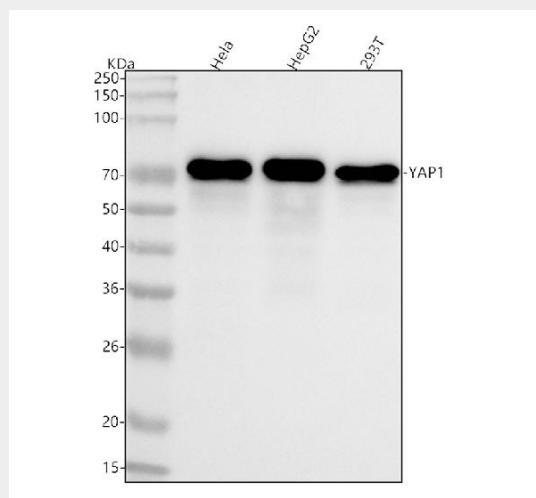


Figure 1. Western blot analysis of YAP1 using anti-YAP1 antibody (M00116).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

- Lane 1: human HeLa whole cell lysates,
- Lane 2: human HepG2 whole cell lysates,
- Lane 3: human 293T whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90

minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-YAP1 antigen affinity purified monoclonal antibody (Catalog # M00116) at 1:5000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for YAP1 at approximately 70 kDa. The expected band size for YAP1 is at 54 kDa.