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YAP / YAP1 Antibody (clone 2H1)
Mouse Monoclonal Antibody
Catalog # ALS13463

Specification

YAP / YAP1 Antibody (clone 2H1) - Product Information

Application	**IF, IHC**
Primary Accession	P46937
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**54kDa KDa**

YAP / YAP1 Antibody (clone 2H1) - Additional Information

Gene ID 10413

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

Reconstitution & Storage
Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
YAP / YAP1 Antibody (clone 2H1) is for research use only and not for use in diagnostic or therapeutic procedures.

YAP / YAP1 Antibody (clone 2H1) - 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 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).

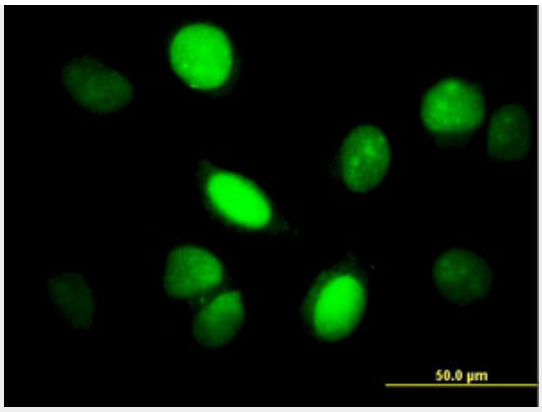
YAP / YAP1 Antibody (clone 2H1) - Protocols

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

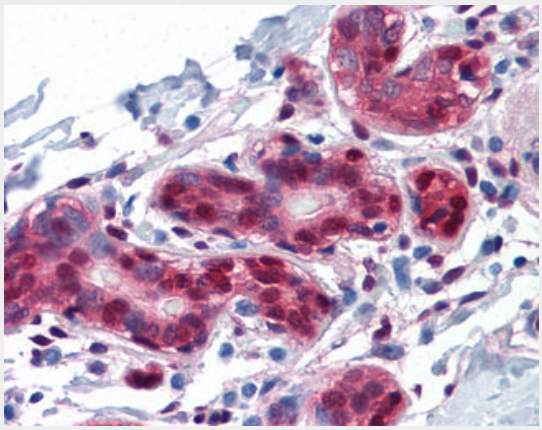
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

YAP / YAP1 Antibody (clone 2H1) - Images

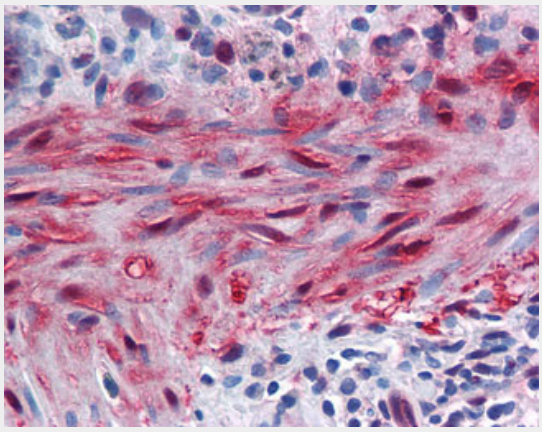
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Immunofluorescence of monoclonal antibody to YAP1 on HeLa cell (antibody concentration 40 ug/ml).

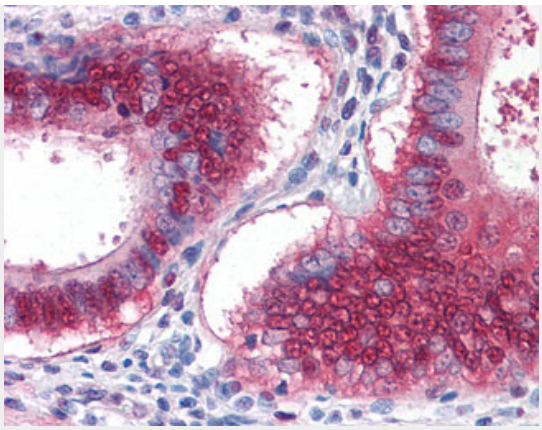


Anti-YAP1 antibody IHC of human breast.



Anti-YAP1 antibody IHC of human colon, muscularis mucosa.

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Anti-YAP1 antibody IHC of human uterus.

YAP / YAP1 Antibody (clone 2H1) - Background

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YAP / YAP1 Antibody (clone 2H1) - References

Sudol M.,et al.J. Biol. Chem. 270:14733-14741(1995).
Komuro A.,et al.J. Biol. Chem. 278:33334-33341(2003).
Inazawa J.,et al.Submitted (JUN-2010) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Taylor T.D.,et al.Nature 440:497-500(2006).