

For Research Use Only

YAP1 Recombinant antibody, PBS Only

Catalog Number: 81090-1-PBS



Basic Information

| | | |
|-------------------------------------|---|--|
| Catalog Number: 81090-1-PBS | GenBank Accession Number: BC038235 | Purification Method: Protein A purification |
| Concentration: 1mg/ml | GeneID (NCBI): 10413 | CloneNo.: 5E3 |
| Source: Rabbit | UNIPROT ID: P46937 | |
| Isotype: IgG | Full Name: Yes-associated protein 1, 65kDa | |
| Immunogen Catalog Number: AG4510 | Calculated MW: 504 aa, 54 kDa | |
| | Observed MW: 65-75 kDa | |

Applications

Tested Applications:
WB, IHC, IF/ICC, Indirect ELISA

Species Specificity:
human, mouse, rat

Background Information

Yes-associated protein 1 (YAP1) is a 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. 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. Plays a key role to control 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. 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. Isoform 2 and isoform 3 can activate the C-terminal fragment (CTF) of ERBB4 (isoform 3). 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). It is activated by phosphorylation and degraded by ubiquitination (20048001). The calculated molecular weight of YAP1 is 54 kDa, but routinely observed at 65-75 kDa by Western Blot (PMID: 28230103, 33264286, 36255405).

Storage

Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:

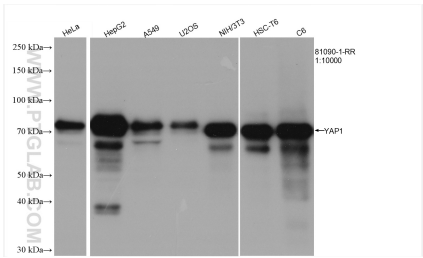
T: 4006900926

E: Proteintech-CN@ptglab.com

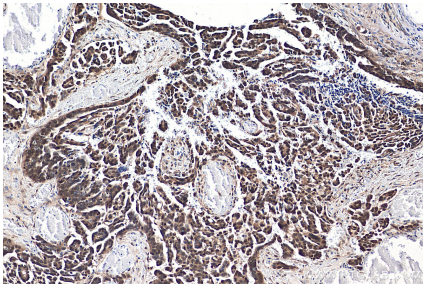
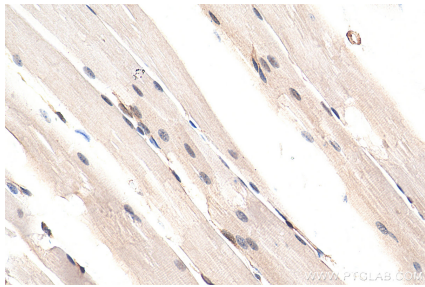
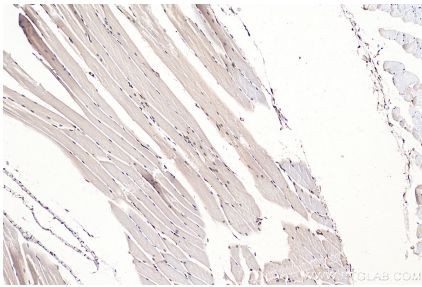
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

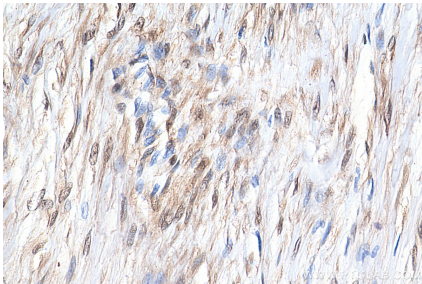
Selected Validation Data



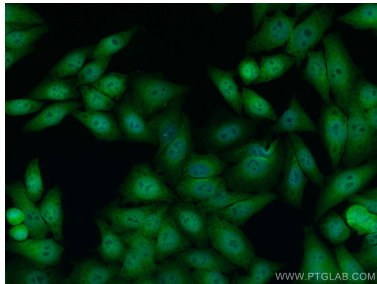
Various lysates were subjected to SDS PAGE followed by western blot with 81090-1-RR (YAP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81090-1-PBS in a different storage buffer formulation.



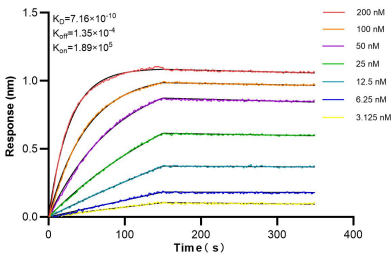
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81090-1-RR (YAP1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81090-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81090-1-RR (YAP1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81090-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using YAP1 antibody (81090-1-RR, Clone: 5E3) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 81090-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81090-1-RR against Human YAP1 were performed. The affinity constant is 0.716 nM.