For Research Use Only

YAP1 Monoclonal antibody, PBS Only

Catalog Number:66900-1-PBS

Featured Product



Basic Information

Catalog Number: 66900-1-PBS Size: 100ug , Concentration: 1mg/ml by Nanodrop; Source: Mouse Isotype: IgG1 Immunogen Catalog Number: AG28194 GenBank Accession Number: BC038235 GeneID (NCBI): 10413 UNIPROT ID: P46937 Full Name: Yes-associated protein 1, 65kDa Calculated MW: 504 aa, 54 kDa Observed MW: 65-70 kDa

Purification Method: Protein G purification CloneNo.: 3A7A9

Applications

Tested Applications: WB, IHC, IF/ICC, 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). Phosphorylation of S381 primes YAP phosphorylation by $CK1\delta/\epsilon$, resulting in activation of a phosphodegron, thus generates a binding surface that interacts with a ubiquitin ligase, and leads to degradation by ubiquitination. (PMID: 20048001). The calcualted molecular weight of YAP1 is 54 kDa, but phosphorylated YAP1 is about 65-70 kDa. (PMID: 26695440)

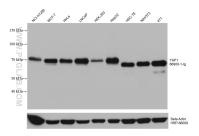
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

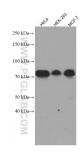
For technical support and original validation data for this product please contact:T: 1 (888) 4PTGLAB (1-888-478-4522) (toll freeE: proteintech@ptglab.comin USA), or 1(312) 455-8498 (outside USA)W: ptglab.com

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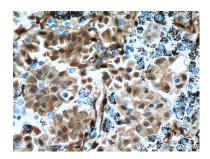
Selected Validation Data



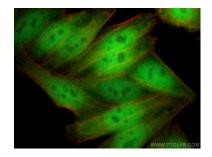
Various lysates were subjected to SDS PAGE followed by western blot with 66900-1-Ig (YAP1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control. This data was developed using the same antibody clone with 66900-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 66900-1-Ig (YAP1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66900-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66900-1-Ig (YAP1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66900-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using YAP1 antibody (66900-1-1g, Clone: 3A7A9) at dilution of 1:800 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002), CL594-Phalloidin (red). This data was developed using the same antibody clone with 66900-1-PBS in a different storage buffer formulation.