

For Research Use Only

YAP1 Polyclonal antibody

Catalog Number: 13584-1-AP

Featured Product

232 Publications



Basic Information

Catalog Number:

13584-1-AP

Size:

150ul, Concentration: 750 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4510

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:

70 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:20-1:200

FC 1:50-1:200

Applications

Tested Applications:

WB, IP, IF, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, IHC, CoIP, CHIP

Species Specificity:

human, mouse, rat

Cited Species:

human, chicken, rat, mouse, monkey, zebrafish, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, BGC-823 cells, MCF-7 cells, HepG2 cells, SGC-7901 cells, mouse liver tissue, rat liver tissue

IP: NIH/3T3 cells,

IHC: human liver cancer tissue, human ovary tumor tissue, human colon cancer tissue

IF: HepG2 cells, human lung cancer tissue

FC: NIH3T3 cells,

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). This antibody is a rabbit polyclonal antibody. The calculated molecular weight of YAP1 is 54 kDa, but phosphorylated YAP1 is about 65kDa. (PMID: 26695440)

Notable Publications

Author	Pubmed ID	Journal	Application
Sebastian Mana-Capelli	30266805	J Biol Chem	WB
Demin Cheng	36166308	JCI Insight	WB
Bang-Yi Lin	32969138	J Cell Mol Med	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

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

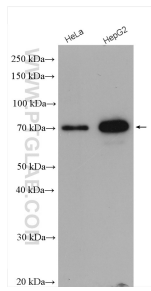
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com

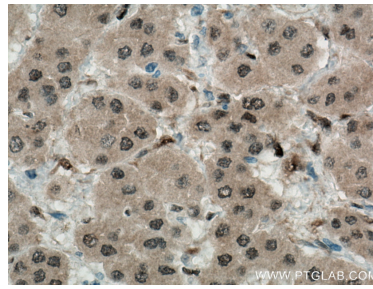
W: ptglab.com

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

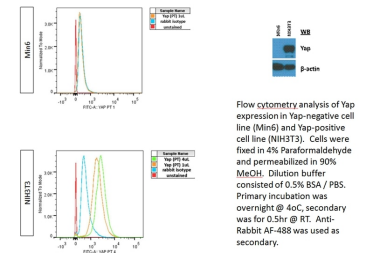
Selected Validation Data



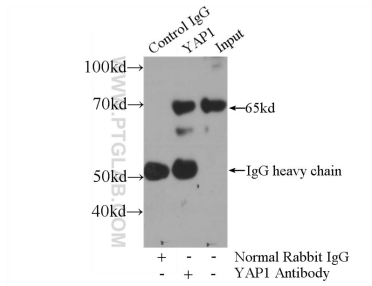
Various lysates were subjected to SDS PAGE followed by western blot with 13584-1-AP (YAP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



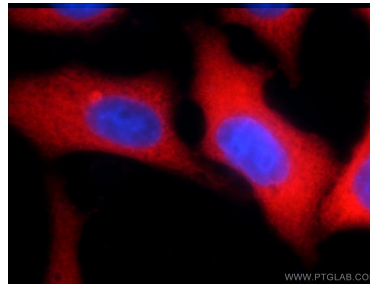
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 13584-1-AP (YAP1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0)).



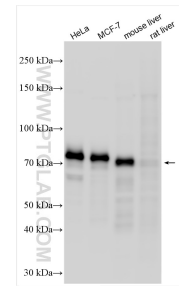
FC result of YAP antibody (13584-1-AP) with Min6 and NIH3T3 cell by Sarvetnick Lab, UNMC.



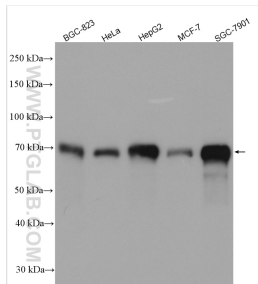
IP result of anti-YAP1 (IP:13584-1-AP, 3 μ g; Detection:13584-1-AP 1:700) with NIH/3T3 cells lysate 1200 μ g.



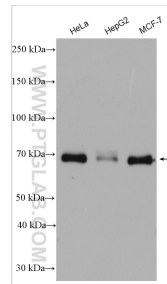
Immunofluorescent analysis of HepG2 cells using 13584-1-AP (YAP1 antibody) at dilution of 1:50 and Rhodamine-Goat anti-Rabbit IgG.



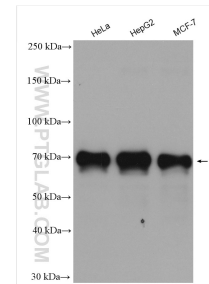
Various lysates were subjected to SDS PAGE followed by western blot with 13584-1-AP (YAP1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



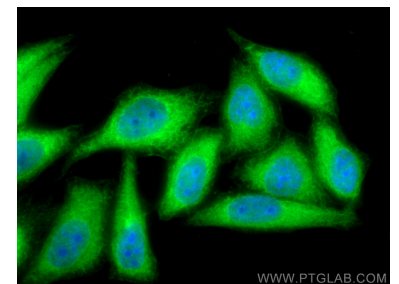
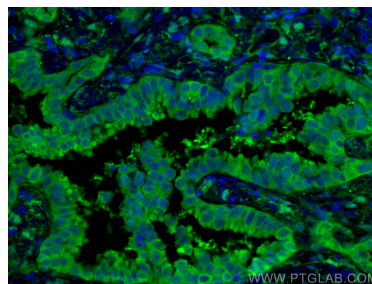
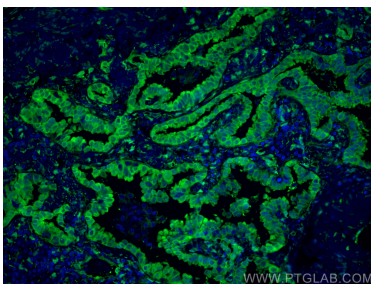
Various lysates were subjected to SDS PAGE followed by western blot with 13584-1-AP (YAP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 13584-1-AP (YAP1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 13584-1-AP (YAP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using YAP1 antibody (13584-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using YAP1 antibody (13584-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using YAP1 antibody (13584-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).