For Research Use Only

YAP1 Polyclonal antibody

Catalog Number:30464-1-AP

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Basic Information

Catalog Number:
30464-1-AP

Size:
150ul , Concentration: 700 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG33106

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:
65-75 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:1500-1:6000
IF/ICC 1:200-1:800

Applications

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

Species Specificity:
human

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, MCF-7 cells

IHC : human stomach cancer tissue,

IF/ICC : HepG2 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 actived by phosphorylation and degradated by ubiquitination (20048001). The calcualted molecular weight of YAP1 is 54 kDa, but routinely observed at 65-75 kDa by Western Blot (PMID: 28230103, 33264286, 36255405).

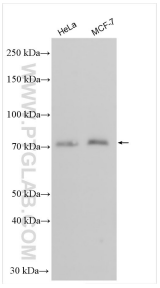
Storage

Storage:
Store at -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

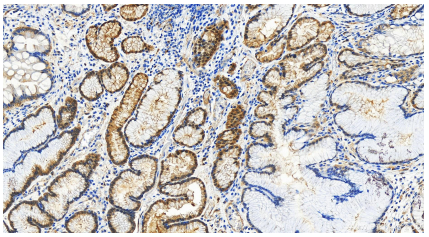
*** 20ul sizes contain 0.1% BSA

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

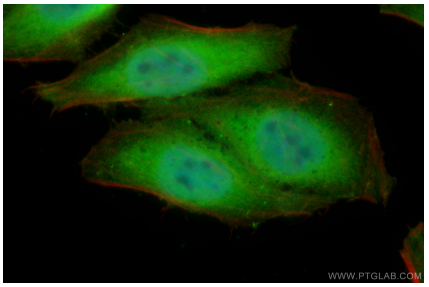
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 30464-1-AP (YAP1 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 30464-1-AP (YAP1 antibody) at dilution of 1:3000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using YAP1 antibody (30464-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).