abcam

Product datasheet

Anti-YAP1 antibody ab52708

1 Image

Overview

Product name	Anti-YAP1 antibody
Description	Mouse polyclonal to YAP1
Host species	Mouse
Specificity	This antibody reacts with Yes associated protein 1.
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse
Immunogen	Recombinant fusion protein: LDPRLDPRFAMNQRISQSAP , corresponding to amino acids 259-278 of Human Yes Associated Protein 1 Run BLAST with Run BLAST with
Positive control	Purchase matching WB positive control: **Recombinant Human YAP1 protein** ›

General notes

This antibody was raised by a genetic immunization technique. Genetic immunization can be used to generate antibodies by directly delivering antigen-coding DNA into the animal, rather than injecting a protein or peptide (Tang *et al.* PubMed: 1545867; Chambers and Johnston PubMed 12910245; Barry and Johnston PubMed: 9234514). The animal's cells produce the protein, which stimulates the animal's immune system to produce antibodies against that particular protein. A vector coding for a partial fusion protein was used for genetic immunisation of a mouse and the resulting serum was tested in Western blot against an *E.coli* lysate containing that partial fusion protein. Genetic immunization offers enormous advantages over the traditional protein-based immunization method. DNA is faster, cheaper and easier to produce and can be produced by standard techniques readily amenable to automation. Furthermore, the antibodies generated by genetic immunization are usually of superior quality with regard to specificity, affinity and recognizing the native protein.

Properties

Form	Liquid

Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: 50% Glycerol, Whole serum
Purity	Whole antiserum
Primary antibody notes	This antibody was raised by a genetic immunization technique. Genetic immunization can be used to generate antibodies by directly delivering antigen-coding DNA into the animal, rather than injecting a protein or peptide (Tang *et al.* PubMed: 1545867; Chambers and Johnston PubMed 12910245; Barry and Johnston PubMed: 9234514). The animal's cells produce the protein, which stimulates the animal's immune system to produce antibodies against that particular protein. A vector coding for a partial fusion protein was used for genetic immunisation of a mouse and the resulting serum was tested in Western blot against an *E.coli* lysate containing that partial fusion protein. Genetic immunization offers enormous advantages over the traditional protein-based immunization method. DNA is faster, cheaper and easier to produce and can be produced by standard techniques readily amenable to automation. Furthermore, the antibodies generated by genetic immunization are usually of superior quality with regard to specificity, affinity and recognizing the native protein.
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab52708** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

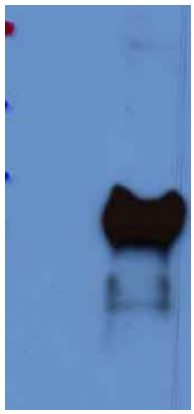
Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 32.2 kDa (predicted molecular weight: 49 kDa). This antibody has been tested in Western blot against an *E.coli* lysate containing the partial recombinant fusion protein used as an immunogen. We have no data on detection of endogenous protein.

Target

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. The core of this pathway is composed of a kinase cascade wherein MST1/MST2, 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).
Tissue specificity	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).

Sequence similarities	Belongs to the YORKIE family. Contains 2 WW domains.
Post-translational modifications	Phosphorylated by LATS1 and LATS2; leading to cytoplasmic translocation and inactivation. Phosphorylated by ABL1; leading to YAP1 stabilization, enhanced interaction with TP73 and recruitment onto proapoptotic genes; in response to DNA damage.
Cellular localization	Cytoplasm. Nucleus. Both phosphorylation and cell density can regulate its subcellular localization. Phosphorylation sequesters it in the cytoplasm by inhibiting its translocation into the nucleus. At low density, predominantly nuclear and is translocated to the cytoplasm at high density.

Images



Western blot - Anti-YAP1 antibody (ab52708)

All lanes : Anti-YAP1 antibody (ab52708) at 1/1000 dilution

Lane 1 : Total protein extract from E coli with ~50ng to 100 ng of a recombinant fusion protein of an irrelevant antigen.
Lane 2 : Total protein extract from E coli with ~50ng to 500ng of the antigen (recombinant fusion protein tagged).

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Rabbit anti-mouse IgG + IgM, (H+L) horseradish peroxidase

conjugated at 1/5000 dilution

Predicted band size: 49 kDa
Observed band size: 32.2 kDa

Note: the molecular weight of the band on the western blot does not correspond to the molecular weight of the natural protein because only a fragment of the gene is used.

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