abcam

Product datasheet

Recombinant Human YAP1 protein ab132459

1 References 1 Image

Description

Product name Recombinant Human YAP1 protein

Expression system Wheat germ
Accession P46937

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MDPGQQPPPQPAPQGQGPPSQPPQGQGPPSGPGQP

APAATQAAPQAPPA

GHQIVHVRGDSETDLEALFNAVMNPKTANVPQTVPMRLR

KLPDSFFKPPE

PKSHSRQASTDAGTAGALTPQHVRAHSSPASLQLGAVSP

GTLTPTGVVSG

PAATPTAQHLRQSSFEIPDDVPLPAGWEMAKTSSGQRYF

LNHIDQTTTWQ

DPRKAMLSQMNVTAPTSPPVQQNMMNSASGPLPDGWE

QAMTQDGEIYYIN

 ${\sf HKNKTTSWLDPRLDPRFAMNQRISQSAPVKQPPPLAPQS}$

PQGGVMGGSNS

 ${\tt NQQQQMRLQQLQMEKERLRLKQQELLRQAMRNINPSTAN}$

SPKCQELALRS

QLPTLEQDGGTQNPVSSPGMSQELRTMTTNSSDPFLNSG

TYHSRDESTDS

GLSMSSYSVPRTPDDFLNSVDEMDTGDTINQSTLPSQQN

RFPDYLEAIPG

TNVDLGTLEGDGMNIEGEELMPSLQEALSSDILNDMESVL

AATKLDKESF LTWL

Predicted molecular weight 81 kDa including tags

Amino acids 1 to 504

Tags GST tag N-Terminus

Specifications

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Our <u>Abpromise guarantee</u> covers the use of ab132459 in the following tested applications.

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

Applications ELISA

SDS-PAGE Western blot

Form Liquid

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.79% Tris HCI, 0.31% Glutathione

General Info

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

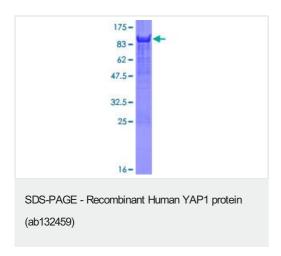
Phosphorylated by LATS1 and LATS2; leading to cytoplasmic translocation and inactivation. Phosphorylated by ABL1; leading to YAP1 stabilization, enhanced interaction with TP73 and

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



SDS-PAGE analysis of ab132459 on a 12.5% gel stained with Coomassie Blue.

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