

Product datasheet for **RN205630**

Yap1 (NM_001034002) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Yap1 (NM_001034002) Rat Untagged Clone
Tag: Tag Free
Symbol: Yap1
Synonyms: Yap; YAP65
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN205630 representing NM_001034002
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGCCCGCGCAACAGCCGCCGCCAGCCGGCCCCGCAAGGCCCGCGCCCGTGGTGTCTCCGG
CCGGGACCCCGCGGCCCGCCCGCACCCCGGGGTCACCAGGTCGTGCACGTCGCGGGGACTCGGA
GACCGACTGGAAGCGCTTTTCAAGCCGTCATGAACCCCAAGACGGCCAACGTGCCACAGACCGTGCC
ATGAGGCTTCGCAAGCTGCCGACTCCTTCTTCAAGCCGCTGAGCCCAAGTCCCACTCGCGACAGGCCA
GTACCGATGCGGGCACTGCTGGAGCCCTGACTCCCCAGCACGTTTCGAGCTCACTCGTCTCCAGCCTCCCT
GCAGCTGGGGGCCGGGCACTCACGGCCAGTGGTGTCTCTGGCCCGGCCACCCCTGCTGTCTCAA
CATCTCAGACAGTCTTCTTTGAGATCCCTGATGATGTACCATTGCCAGCAGGCTGGGAGATGGCCAAGA
CCTCTTCTGGTCAGAGATACTTCTTAAATCACAATGATCAGACAACAATGGCAGGACCCCGGAAGGC
CATGCTCTCCCAACTGAACGTTCTACATCTGCCAGCCAGCAGTGGCCAGACGCTGATGAACTCTGCC
TCAGGGCCTCTTCTGATGGATGGGAGCAAGCCATGACTCAGGATGGAGAAGTTTACTACATAAACCATA
AGAACAAGACCACATCCTGGCTGGACCCCAAGGCTTGACCCTCGTTTTGCCATGAACCAGAGGATCACTCA
GAGTGTCCAGTGAAGCAGCCCCACCCTTGGCTCCCCAGAGCCACAGGGAGGCGTCTGGGTGGAGGC
AGCTCAAACCAGCAGCAGCAGATACAGTGCAGCAGCTACAGATGGAGAAGGAGAGGCTGCGATTGAAAC
AGCAGGAGTTATTTGCGCAGGCAATACGGAATATCAATCCAGCACAGCAAATGCTCCAAAATGTGACAG
CGTCAGAGCGGGAATTAGCTCTCCGAGCCAGTTGCCCTCACTGGAGCAGGATGGAGGGACTCAGAATGC
AGTGTCTTCTCCCGGATGACTCAGGAATTGAGGACAATGACAACCA**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001034002



Insert Size: 1101 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001034002.2](#), [NP_001029174.2](#)

RefSeq Size: 1471 bp

RefSeq ORF: 1101 bp

Locus ID: 363014

UniProt ID: [Q2EJA0](#)

Cytogenetics: 8q11

Gene Summary:

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 in tissue tension and 3D tissue shape by regulating cortical actomyosin network formation. Acts via ARHGAP18, a Rho GTPase activating protein that suppresses F-actin polymerization. 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 (By similarity). Isoform 2, isoform 3 and isoform 4 (lacking the C-terminal transactivation domain) can attenuate p73-mediated cell death signaling in transcriptional repression-induced atypical death (TRIAD) of neurons (PubMed:16461361).[UniProtKB/Swiss-Prot Function]