

Product datasheet for RR205630L2

Yap1 (NM_001034002) Rat Tagged Lenti ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Yap1 (NM_001034002) Rat Tagged Lenti ORF Clone |
| Tag: | mGFP |
| Symbol: | Yap1 |
| Synonyms: | Yap; YAP65 |
| Mammalian Cell Selection: | None |
| Vector: | pLenti-C-mGFP (PS100071) |
| E. coli Selection: | Chloramphenicol (34 ug/mL) |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RR205630). |
| Restriction Sites: | SgfI-MluI |
| Cloning Scheme: | |

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

| | |
|-----------|--------------|
| ACCN: | NM_001034002 |
| ORF Size: | 1098 bp |



[View online »](#)

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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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

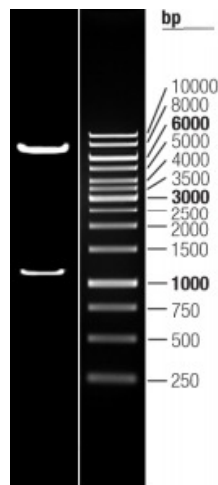
Locus ID: 363014

UniProt ID: [Q2EJAO](#)

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]

Product images:

Double digestion of RR205630L2 using SgfI and MluI