

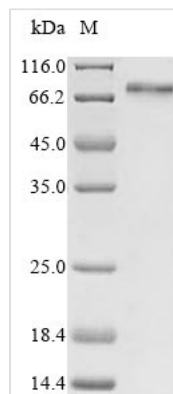


Recombinant Human Transcriptional coactivator YAP1 (YAP1)

Product Code	CSB-EP026244HU
Relevance	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. Isoform 2: Isoform 2 and isoform 3 can activate the C-terminal fragment (CTF) of ERBB4 (isoform 3)
Abbreviation	Recombinant Human YAP1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P46937
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MDPGQQPPPQPAPQGQGQPPSQPPQGQGPPSGPGQPAPAAATQAAPQAPP AGHQIVHVRGDSETDLEALFNAVMPKNTANVPQTVPMLRLKLPDSFFKPPEPK SHSRQASTDAGTAGALTPQHVRHSSPASLQLGAVSPGTLTPTGVVSGPAAT PTAQHLRQSSFEIPDDVPLPAGWEMAKTSSGQRYFLNHIDQTTTWQDPRKAM LSQMNVTAPTSPPVQQNMMSASGGLPDGWEQAMTQDGEIYYINHKNKTTS WLDPRLDPRFAMNQRIQSAPVKQPPPLAPQSPQGGVMGGSNSNQQQQMR LQQLQMEKERLRLKQQELLRQAMRNINPSTANSPKCQELALRSQLEPTLEQDG GTQNPVSSPGMSQELRTMTTNSSDPFLNSGTYHSRDESTDSGLSMSSYSVP RTPDDFLNSVDEMDTGDTINQSTLPSQQNRFPDYLEAIPGTNVDLGTLEGDGM NIEGEELMPSLQEALSSDILNDMESVLAATKLDKESFLTWL
Research Area	Cancer



Source	E.coli
Target Names	YAP1
Protein Names	Protein yorkie homologYes-associated protein YAP65 homologYAP65
Expression Region	1-504aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-B2M-tagged
Mol. Weight	68.5 kDa
Protein Length	Full Length

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The fusion tag N-terminal 6xHis-B2M tag gene was added to the gene sequence corresponding to the E.coli of the human YAP1 protein to form the recombinant DNA. The recombinant DNA was cloned into the expression vector and then transformed into the E.coli for expression. Following purification, the product is the recombinant human YAP1 protein carrying N-terminal 6xHis-B2M tag. The SDS-PAGE assessed the purity of this recombinant YAP1 protein up to 85%. It had an apparent molecular weight of approximately 78 kDa. This recombinant YAP1 protein may be used in YAP1-mediated cancer research.

YAP1 is a gene encoding a protein named transcriptional coactivator YAP1 (abbreviated YAP1) in human and belongs to YAP1 family. This protein acts as a transcriptional regulator by activating the transcription of genes involved in cell proliferation and suppressing apoptotic genes. It 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. Reported diseases associated with YAP1 include Coloboma, Ocular, With Or Without Hearing Impairment, Cleft Lip/Palate, And/Or Mental Retardation and Coloboma Of Macula.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final



concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

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