# Recombinant Human Transcriptional enhancer factor TEF-1 (TEAD1)

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| **Product Code** | CSB-EP023363HU |
| **Relevance** | Transcription factor which plays a key role in the Hippo signaling pathway, a pathway involved 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. Acts by mediating gene expression of YAP1 and WWTR1/TAZ, thereby regulating cell proliferation, migration and epithelial mesenchymal transition (EMT) induction. Binds specifically and cooperatively to the SPH and GT-IIC 'enhansons' (5'-GTGGAATGT-3') and activates transcription in vivo in a cell-specific manner. The activation function appears to be mediated by a limiting cell-specific transcriptional intermediary factor (TIF). Involved in cardiac development. Binds to the M-CAT motif. |
| **Abbreviation** | Recombinant Human TEAD1 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.** | P28347 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Homo sapiens (Human) |
| **Purity** | Greater than 85% as determined by SDS-PAGE. |
| **Sequence** | MEPSSWSGSESPAENMERMSDSADKPIDNDAEGVWSPDIEQSFQEALAIYPP CGRRKIILSDEGKMYGRNELIARYIKLRTGKTRTRKQVSSHIQVLARRKSRDFH SKLKDQTAKDKALQHMAAMSSAQIVSATAIHNKLGLPGIPRPTFPGAPGFWPG MIQTGQPGSSQDVKPFVQQAYPIQPAVTAPIPGFEPASAPAPSVPAWQGRSIG TTKLRLVEFSAFLEQQRDPDSYNKHLFVHIGHANHSYSDPLLESVDIRQIYDKF PEKKGGLKELFGKGPQNAFFLVKFWADLNCNIQDDAGAFYGVTSQYESSENM TVTCSTKVCSFGKQVVEKVETEYARFENGRFVYRINRSPMCEYMINFIHKLKHL PEKYMMNSVLENFTILLVVTNRDTQETLLCMACVFEVSNSEHGAQHHIYRLVK D |
| **Research Area** | others |
| **Source** | E.coli |
| **Target Names** | TEAD1 |
| **Protein Names** | NTEF-1Protein GT-IICTEA domain family member 1 |
| **Expression Region** | 1-426aa |

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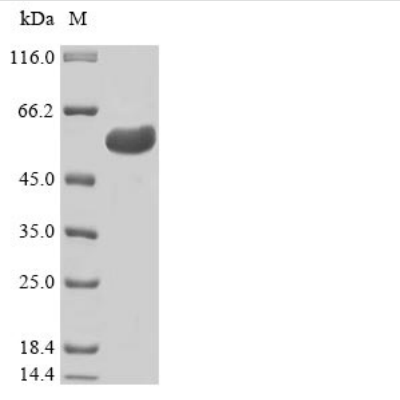
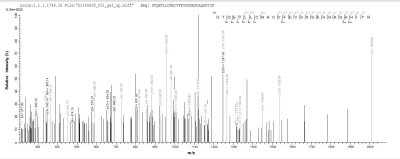
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | N-terminal 6xHis-tagged |
| **Mol. Weight** | 51.9 kDa |
| **Protein Length** | Full Length |

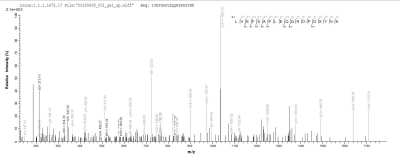
**Image**




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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP023363HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) TEAD1.



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**Description**

The production of this recombinant Human TEAD1 protein is just like all recombinant proteins. The process involved transfecting E.coli cells with DNA vector containing the template of recombinant DNA. The E.coli cells containing the template were then cultured so that they could transcribe and translate the TEAD1 protein. N-terminal 6xHis tag was used in the process. The purity is 0.85 determined by SDS-PAGE.

Members of the highly related TEF-1 family (also known as TEAD, for TEF-1, TEC1, ABAA domain) bind to MCAT (muscle C, A and T sites) and A/T-rich sites in promoters active in cardiac, skeletal and smooth muscle, placenta, and neural crest. The gene regulatory activities of TEF-1 are governed by interactions with protein cofactors. For instance, interactions of TEF-1 with Max and serum response factor regulate the MHC gene and normal cardiac and smooth muscle development. TEF-1 family members are broadly expressed. But function as transcriptional activators only in a subset of their expression domains (cardiac, skeletal and smooth muscle, placenta, and skin. The strong transcriptional co-activator YAP65 interacts with all TEF-1 family members. TEAD transcription factors are key components of the Hippo–YAP1 signaling

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| | pathway. Some studies suggested that conclude that the mutation in the TEAD1 gene is the cause of Sveinsson's chorioretinal atrophy. |
| **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.<br>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. |