





Recombinant Human G1/S-specific cyclin-D1 (CCND1)

| Product Code | CSB-EP004811HU |
|-------------------|--|
| Relevance | Regulatory component of the cyclin D1-CDK4 (DC) complex that phosphorylates and inhibits mbers of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G1/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G1 phase. Hypophosphorylates RB1 in early G1 phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner. |
| Abbreviation | Recombinant Human CCND1 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. | P24385 |
| Product Type | Recombinant Proteins |
| Immunogen Species | Homo sapiens (Human) |
| Purity | Greater than 90% as determined by SDS-PAGE. |
| Sequence | MEHQLLCCEVETIRRAYPDANLLNDRVLRAMLKAEETCAPSVSYFKCVQKEVL PSMRKIVATWMLEVCEEQKCEEEVFPLAMNYLDRFLSLEPVKKSRLQLLGATC MFVASKMKETIPLTAEKLCIYTDNSIRPEELLQMELLLVNKLKWNLAAMTPHDFI EHFLSKMPEAEENKQIIRKHAQTFVALCATDVKFISNPPSMVAAGSVVAAVQGL NLRSPNNFLSYYRLTRFLSRVIKCDPDCLRACQEQIEALLESSLRQAQQNMDP KAAEEEEEEEEEVDLACTPTDVRDVDI |
| Research Area | Cell Cycle |
| Source | E.coli |
| Target Names | CCND1 |
| Expression Region | 1-295aa |
| 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 | 37.7kDa |





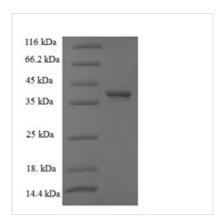




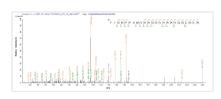
Protein Length

Full Length

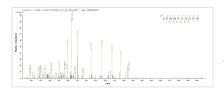
Image



(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-EP004811HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) CCND1.



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Description

Enhance your cell cycle research with our Recombinant Human CCND1 protein, a vital component in cell cycle progression and cellular proliferation. G1/Sspecific cyclin-D1, encoded by the CCND1 gene, is a regulatory subunit of cyclin-dependent kinases and plays a significant role in driving the cell cycle from G1 phase to S phase. The protein is implicated in a variety of cancers, making it an essential target for cancer research.

Our Recombinant Human CCND1 protein is expressed in an E.coli system, delivering a high-quality full-length protein covering the 1-295aa region. The Nterminal 6xHis-tag ensures efficient protein purification, providing the reliable and consistent product necessary for your experiments. With a purity greater than 90% as determined by SDS-PAGE, our Recombinant Human CCND1 protein guarantees the reliability and accuracy you need for your research. Choose between liquid or lyophilized powder form to suit your laboratory requirements and drive your cell cycle studies forward.

Shelf Life

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.