

Product datasheet for **SC333098**

Casein Kinase 1 alpha (CSNK1A1) (NM_001271741) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Casein Kinase 1 alpha (CSNK1A1) (NM_001271741) Human Untagged Clone
Tag: Tag Free
Symbol: Casein Kinase 1 alpha
Synonyms: CK1; CK1a; CK1a; HEL-S-77p; HLCDGP1; PRO2975
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC333098 representing NM_001271741.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGGCGAGTAGCAGCGGCTCCAAGGCTGAATTCATTGTGCGGAGGGAAATATAAACTGGTACGGAAGATC
GGGTCTGGCTCCTTCGGGGACATCTATTTGGCGATCAACATCACCAACGGCGAGGAAGTGGCAGTGAAG
CTAGAATCTCAGAAGGCCAGGCATCCCCAGTTGCTGTACGAGAGCAAGCTCTATAAGATTCTTCAAGGT
GGGTTGGCATCCCCACATACGGTGGTATGGTCAGGAAAAGACTACAATGTACTAGTCATGGATCTT
CTGGGACCTAGCCTCGAAGACCTCTTCAATTTCTGTTCAAGAAGGTTACAATGAAAAGTACTTATG
TTAGCTGACCAGATGATCAGTAGAATTGAATATGTGCATACAAAGAATTTATACACAGAGACATTTAAA
CCAGATAACTTCCTAATGGGTATTGGGCGTCACTGTAATAAGTTATTCCTTATTGATTTTGGTTTGGCC
AAAAAGTACAGAGACAACAGGACAAGGCAACACATACCATACAGAGAAGATAAAAAACCTCACTGGCACT
GCCCGATATGCTAGCATCAATGCACATCTTGGTATTGAGCAGAGTCGCCGAGATGACATGGAATCATT
GGATATGTTTTGATGTATTTAATAGAACCAGCCTGCCATGGCAAGGGCTAAAGGCTGCAACAAAGAAA
CAAAAATATGAAAAGATTAGTAAAAGAAGATGTCCACGCCTGTTGAAGTTTTATGTAAGGGTTTCT
GCAGAATTTGCGATGTACTTAACTATTGTCGTGGGCTACGCTTTGAGGAAGCCCCAGATTACATGTAT
CTGAGGCAGCTATTCGCATTCTTTT CAGGACCCTGAACCATCAATATGACTACACATTTGATTGGACA
ATGTTAAAGCAGAAAGCAGCACAGCAGGCAGCCTCTTCCAGTGGCAGGGTCAGCAGGCCCAACCCCC
ACAGGTTTCTAA
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Restriction Sites: SgfI-MluI
ACCN: NM_001271741
Insert Size: 978 bp
OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_001271741.1](#)

RefSeq Size: 2541 bp

RefSeq ORF: 978 bp

Locus ID: 1452

UniProt ID: [P48729](#)

Cytogenetics: 5q32

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

Protein Pathways: Hedgehog signaling pathway, Wnt signaling pathway

MW: 37.6 kDa

Gene Summary: Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Phosphorylates CTNNB1 at 'Ser-45'. May phosphorylate PER1 and PER2. May play a role in segregating chromosomes during mitosis (PubMed:11955436, PubMed:1409656, PubMed:18305108). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed:23902688).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) lacks an in-frame internal exon and uses an alternate splice site, compared to variant 1. This results in a shorter protein (isoform 3), compared to isoform 1.