

Product datasheet for SC333099

OriGene Technologies, Inc.

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Casein Kinase 1 alpha (CSNK1A1) (NM_001271742) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Casein Kinase 1 alpha (CSNK1A1) (NM_001271742) Human Untagged Clone

Tag: Tag Free

Symbol: Casein Kinase 1 alpha

Synonyms: CK1; CK1a; CKIa; HEL-S-77p; HLCDGP1; PRO2975

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC333099 representing NM_001271742.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGATCTTCTGGGACCTAGCCTCGAAGACCTCTTCAATTTCTGTTCAAGAAGGTTCACAATGAAAACT
GTACTTATGTTAGCTGACCAGATGATCAGTAGAATTGAATATGTGCATACAAAGAATTTTATACACAGA
GACATTAAACCAGATAACTTCCTAATGGGTATTGGGCGTCACTGTAATAAGTGTTTAGAATCTCCAGTG
GGGAAGAGGAAAAGAAGCATGACTGTTAGTACTTCTCAGGACCCATCTTTCTCAGGATTAAACCAGTTA
TTCCTTATTGATTTTGGTTTTGGCCAAAAAGTACAGAGACAACAGGACAAGGCAACACATACCATACAGA
GAAGATAAAAACCTCACTGGCACTGCCCGATATGCTAGCATCAATGCACATCTTGGTATTGAGCAGAGT
CGCCGAGATGACATGGAATCATTAGGATATGTTTTGATGTATTTTAATAGAACCAGCCTGCCATGGCAA
GGGCTAAAGGCTGCAACAAAGAAACAAAAATATGAAAAGATTAGTGAAAAGAAGAAGATGTCCACGCCTGTT
GAAGTTTTATGTAAGGGGTTTCCTGCAGAATTTGCGATGTACTTAAACTATTGTCGTGGGCTACCCTTT
GAGGAAGCCCCAGATTACATGTATCTGAGGCAGCTATTCCGCATTCTTTTCAGGACCCTGAACCATCAA
TATGACTACACATTTGATTGGACAATGTTAAAGCAGAAACCAAGAGTAACATGAAAGGTTTC

TAA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001271742

Insert Size: 831 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. Cer

- 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 001271742.1

 RefSeq Size:
 2100 bp

 RefSeq ORF:
 831 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: 32.1 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 (4) differs in the 5' UTR and lacks a portion of the 5' coding region, compared to variant 1. These differences cause translation initiation at a downstream

AUG and result in an isoform (4) with a shorter N-terminus, compared to isoform 1.