

## Product datasheet for RC202145L1

#### OriGene Technologies, Inc.

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## CSNK1G2 (NM\_001319) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** CSNK1G2 (NM\_001319) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CSNK1G2
Synonyms: CK1g2

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC202145).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_001319

ORF Size: 1245 bp





### CSNK1G2 (NM\_001319) Human Tagged Lenti ORF Clone - RC202145L1

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**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:** <u>NM 001319.5</u>, <u>NP 001310.2</u>

RefSeq Size: 2921 bp
RefSeq ORF: 1248 bp
Locus ID: 1455
UniProt ID: P78368

**Cytogenetics:** 19p13.3

**Domains:** pkinase, TyrKc, S TKc

**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Hedgehog signaling pathway

**MW:** 47.4 kDa

**Gene Summary:** Serine/threonine-protein kinase. 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 COL4A3BP/CERT,

MTA1 and SMAD3. Involved in brain development and vesicular trafficking and

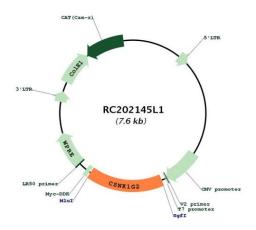
neurotransmitter releasing from small synaptic vesicles. Regulates fast synaptic transmission

mediated by glutamate. SMAD3 phosphorylation promotes its ligand-dependent

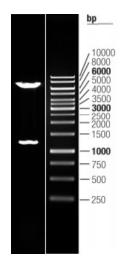
ubiquitination and subsequent proteasome degradation, thus inhibiting SMAD3-mediated TGF-beta responses. Hyperphosphorylation of the serine-repeat motif of COL4A3BP/CERT leads to its inactivation by dissociation from the Golgi complex, thus down-regulating ER-to-Golgi transport of ceramide and sphingomyelin synthesis. Triggers PER1 proteasomal degradation probably through phosphorylation.[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for RC202145L1



Double digestion of RC202145L1 using Sgfl and Mlul  $\,$