

## **Product datasheet for TR320318**

## OriGene Technologies, Inc.

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## CSNK2A2 Human shRNA Plasmid Kit (Locus ID 1459)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** CSNK2A2 Human shRNA Plasmid Kit (Locus ID 1459)

**Locus ID:** 1459

**Synonyms:** CK2A2; CK2alpha'; CSNK2A1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

CSNK2A2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

1459). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** NM 001896, NM 001896.1, NM 001896.2, BC008812, NM 001896.4

UniProt ID: P19784

**Summary:** This gene encodes the alpha', or alpha 2, catalytic subunit of the protein kinase enzyme,

casein kinase 2 (CK2). Casein kinase 2 is a serine/threonine protein kinase that

phosphorylates acidic proteins such as casein. It is involved in various cellular processes, including cell cycle control, apoptosis, and circadian rhythms. This heterotetrameric kinase includes two catalytic subunits, either alpha or alpha', and two regulatory beta subunits. The closely related gene paralog encoding the alpha, or alpha 1 subunit (CSNK2A1, Gene ID: 1457) is found on chromosome 20. An intronic variant in this gene (alpha 2) may be associated with leukocyte telomere length in a South Asian population. A related transcribed pseudogene is

found on chromosome 11. [provided by RefSeq, Aug 2017]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).