

Product datasheet for TR313697

OriGene Technologies, Inc.

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beta Casein (CSN2) Human shRNA Plasmid Kit (Locus ID 1447)

Product data:

Product Type: shRNA Plasmids

Product Name: beta Casein (CSN2) Human shRNA Plasmid Kit (Locus ID 1447)

Locus ID: 1447

Synonyms: CASB; PDC213

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Puromycin

Format: Retroviral plasmids

CSN2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

1447). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001302770, NM 001891, NM 001891.1, NM 001891.2, NM 001891.3, NM 001302770.1,

BC096194, BC069554, BC096195, BC096196, BC096197

UniProt ID: P05814

Summary: This gene is a member of the beta casein family. There are two types of casein protein, beta

(encoded by this gene) and kappa, both of which are secreted in human milk. Beta casein is the principal protein in human milk and the primary source of essential amino acids for a suckling infant. Beta and kappa casein proteins acting together form spherical micelles which bind within them important dietary minerals, such as calcium and phosphorous. In addition, the C-terminal 14 aa of the protein has antimicrobial activity, especially in preterm milk, displaying antibacterial activity against S. aureus and Y. enterocolitica. Alternative splicing

results in multiple transcript variants. [provided by RefSeg, Jul 2020]

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).