

## **Product datasheet for SC303092**

## OriGene Technologies, Inc.

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## beta Casein (CSN2) (NM\_001891) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: beta Casein (CSN2) (NM 001891) Human Untagged Clone

Tag: Tag Free

Symbol: beta Casein

Synonyms: CASB; PDC213

**Mammalian Cell** 

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM\_001891 edited

CATAACCCCATTAGTGTCTAA

**Restriction Sites:** Please inquire ACCN: NM 001891

Insert Size: 700 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).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.





**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 001891.1</u>, <u>NP 001882.1</u>

RefSeq Size: 1065 bp
RefSeq ORF: 681 bp
Locus ID: 1447
UniProt ID: P05814
Cytogenetics: 4q13.3

**Protein Families:** Secreted Protein

**Gene 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 RefSeq, Jul 2020]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer

isoform (1).