

Product datasheet for RC222278L4V

OriGene Technologies, Inc.

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Calpastatin (CAST) (NM_173061) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Calpastatin (CAST) (NM_173061) Human Tagged ORF Clone Lentiviral Particle

Symbol: CAST

Synonyms: BS-17; calpain inhibitor; calpastatin; heart-type calpastatin; MGC9402;

OTTHUMP00000158519; OTTHUMP00000158520; sperm BS-17 component

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_173061 **ORF Size:** 1290 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(RC222278).

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.

RefSeq: <u>NM 173061.1</u>, <u>NP 775084.1</u>

RefSeq Size:1889 bpRefSeq ORF:1292 bp

Locus ID: 831

Cytogenetics: 5q15

MW: 46.9 kDa





Gene Summary:

The protein encoded by this gene is an endogenous calpain (calcium-dependent cysteine protease) inhibitor. It consists of an N-terminal domain L and four repetitive calpain-inhibition domains (domains 1-4), and it is involved in the proteolysis of amyloid precursor protein. The calpain/calpastatin system is involved in numerous membrane fusion events, such as neural vesicle exocytosis and platelet and red-cell aggregation. The encoded protein is also thought to affect the expression levels of genes encoding structural or regulatory proteins. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jun 2010]