

Product datasheet for RC222278L4

OriGene Technologies, Inc.

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Calpastatin (CAST) (NM_173061) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

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

Tag: mGFP

Symbol: Calpastatin

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)

E. coli Selection: Chloramphenicol (34 ug/mL)

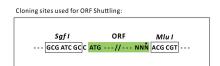
ORF Nucleotide

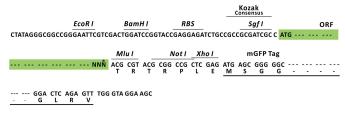
The ORF insert of this clone is exactly the same as(RC222278).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

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





Calpastatin (CAST) (NM_173061) Human Tagged Lenti ORF Clone - RC222278L4

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: NM 173061.1, NP 775084.1

RefSeq Size: 1889 bp RefSeq 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

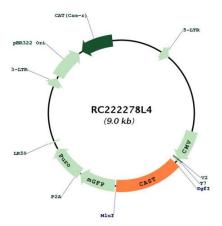
to affect the expression levels of genes encoding structural or regulatory proteins.

Alternatively spliced transcript variants encoding different isoforms have been described.

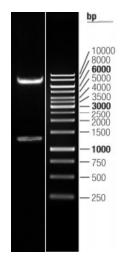
[provided by RefSeq, Jun 2010]



Product images:



Circular map for RC222278L4



Double digestion of RC222278L4 using Sgfl and Mlul $\,$