OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG236037

Cystatin C (CST3) (NM_001288614) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cystatin C (CST3) (NM_001288614) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cystatin C
Synonyms:	ARMD11; HEL-S-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG236037 representing NM_001288614.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCCGGGCCCCTGCGCGCCCCGCTGCTCCTGCTGGCCATCCTGGCCGTGGCCCTGGCCGTGAGCCCC
GCGGCCGGCTCCAGTCCCGGCAAGCCGCCGCGCCTGGTGGGAGGCCCCATGGACGCCAGCGTGGAGGAG
GAGGGTGTGCGGCGTGCACTGGACTTTGCCGTCGGCGAGTACAACAAAGCCAGCAACGACATGTACCAC
AGCCGCGCGCTGCAGGTGGTGCGCGCCCGCAAGCAGATCGTAGCTGGGGTGAACTACTTCTTGGACGTG
GAGCTGGGCCGAACCACGTGTACCAAGACCCAGCCCAACTTGGACAACTGCCCCTTCCATGACCAGCCA
CATCTGAAAAGGAAAGCATTCTGCTCTTTCCAGATCTACGCTGTGCCTTGGCAGGGCACAATGACCTTG
TCGAAATCCACCTGTCAGGACGCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence:

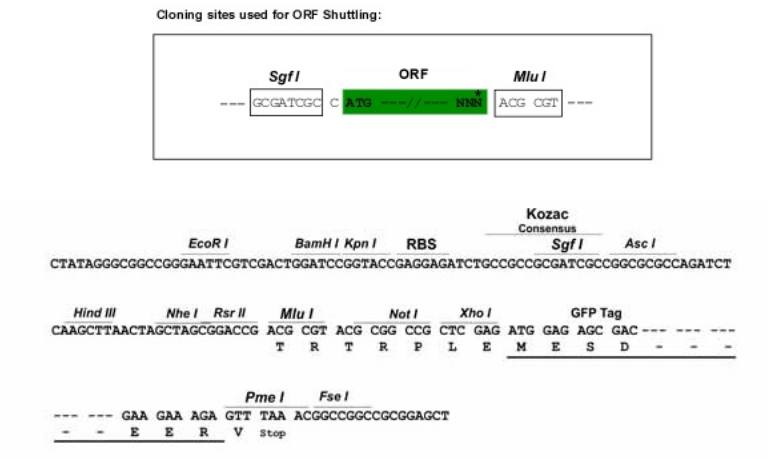
>Peptide sequence encoded by RG236037
Blue=ORF Red=Cloning site Green=Tag(s)

MAGPLRAPLLLLAILAVALAVSPAAGSSPGKPPRLVGGPMDASVEEEGVRRALDFAVGEYNKASNDMYH
SRALQVVRARKQIVAGVNYFLDVELGRTTCTKTQPNLDNCPFHDQPHLKRKAFCSFQIYAVPWQGTMTL
SKSTCQDA
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

View online »

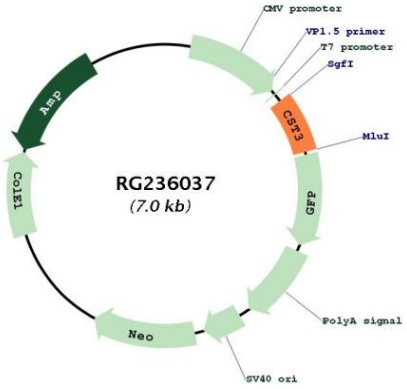
Cloning Scheme:



ACCN:	NM_001288614
ORF Size:	438 bp
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).
RefSeq:	NM_001288614.1, NP_001275543.1
RefSeq Size:	2209 bp
RefSeq ORF:	441 bp
Locus ID:	1471
UniProt ID:	P01034
Cytogenetics:	20p11.21
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
MW:	15.8 kDa

Gene Summary: The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and the kininogens. The type 2 cystatin proteins are a class of cysteine proteinase inhibitors found in a variety of human fluids and secretions, where they appear to provide protective functions. The cystatin locus on chromosome 20 contains the majority of the type 2 cystatin genes and pseudogenes. This gene is located in the cystatin locus and encodes the most abundant extracellular inhibitor of cysteine proteases, which is found in high concentrations in biological fluids and is expressed in virtually all organs of the body. A mutation in this gene has been associated with amyloid angiopathy. Expression of this protein in vascular wall smooth muscle cells is severely reduced in both atherosclerotic and aneurysmal aortic lesions, establishing its role in vascular disease. In addition, this protein has been shown to have an antimicrobial function, inhibiting the replication of herpes simplex virus. Alternative splicing results in multiple transcript variants encoding a single protein. [provided by RefSeq, Nov 2014]

Product images:



Circular map for RG236037