

Product datasheet for **RG210730**

Cystatin C (CST3) (NM_000099) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cystatin C (CST3) (NM_000099) 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: >RG210730 representing NM_000099
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGGCCCTGCGGCCCGCTGCTCCTGCTGGCCATCCTGGCCGTGGCCCTGGCCGTGAGCCCCG
CGGCCGGCTCCAGTCCCAGCAAGCCGCGCCTGGTGGGAGGCCCATGGACGCCAGCGTGAGGAGGA
GGGTGTGCGCGTGCCTGGACTTTGCCGTCGGCAGTACAACAAAGCCAGCAACGACATGTACCACAGC
CGCGCGTGCAGGTGGTGCAGCCCGCAAGCAGATCGTAGCTGGGGTGAAGTACTTCTTGACGTGGAGC
TGGCCGAACCAGTGTACCAAGACCCAGCCCACTTGGACAACGCCCCTTCCATGACCAGCCACATCT
GAAAAGGAAAGCATTCTGCTCTTCCAGATCTACGCTGTGCCCTTGGCAGGGCACAATGACCTTGTGAAA
TCCACCTGTCAGGACGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG210730 representing NM_000099
Red=Cloning site Green=Tags(s)

MAGPLRAPLLLLLAILAVALAVSPAAGSSPGKPPRLVGGPMDASVEEEGVRRALDFAVGEYNKASNDMYHS
RALQVVRARKQIVAGVNYFLDVELGRTTCTKTQPNLDNCPFHDPHLKRKAFCSFQIYAVPWQGTMTLSK
STCQDA

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_000099

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).

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_000099.3](#)

RefSeq Size: 818 bp

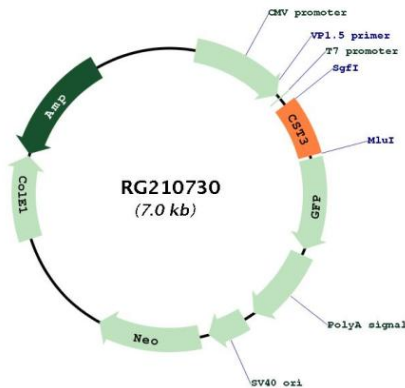
RefSeq ORF: 441 bp

Locus ID: 1471

UniProt ID: [P01034](#)

Cytogenetics:	20p11.21
Domains:	CY
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Gene Summary:	<p>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]</p>

Product images:



Circular map for RG210730