

Product datasheet for RC210730

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

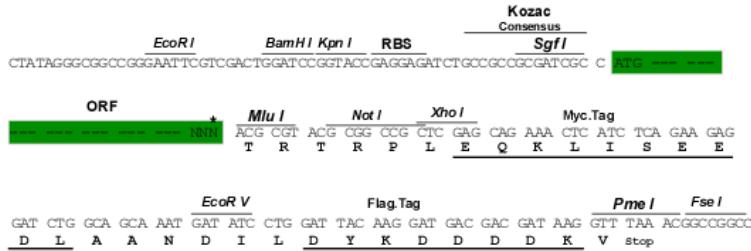
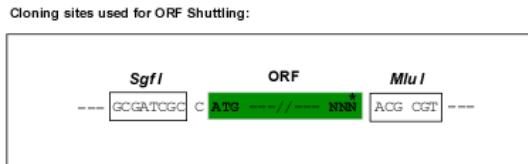
Product data:

Product Type:	Expression Plasmids
Product Name:	Cystatin C (CST3) (NM_000099) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cystatin C
Synonyms:	ARMD11; HEL-S-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210730 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTGTAAATAGCACTCACTATAAGGCCGCCGGATTCTCGACTGGATCCGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCCGGCCCCCTGCGGCCCGCTGCTCTGCTGCCATCCTGGCGTGGCCCTGGCGTGAGCCCC CGGCCGGCTCCAGTCCCGCAAGCCGCCGCTGGTGGAGGCCCATGGACGCCAGCGTGGAGGA GGGTGTGCGGCGTGCAGTGGACTTTGCCGTGGCGAGTACAACAAAGCCAGCAACGACATGTACCACAGC CGCGCCTGCAGGTGGTGCAGGCCGAAGCAGATCGTAGCTGGGTGAACTACTCTTGACGTGGAGC TGGCCGAACCACTGTACCAAGACCCAGCCAACTTGGACAATGCCCTTCATGACCAGCCACATCT GAAAAGGAAAGCATTCTGCTTTCCAGATCTACGCTGTGCCTGGAGGGACAATGACCTTGTGAA TCCACCTGTCAGGACGCC ACCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGTTAA
Protein Sequence:	>RC210730 protein sequence Red=Cloning site Green=Tags(s) MAGPLRAPLLLAILAVALAVSPAAGSSPGKPPRLVGGPMDasVEEEGVRRALDFAVGEYNKASNDMYHS RALQVVRARKQIVAGVNYFLDVELGRTTCKTQPNLNCPFHDQPHLKRKAFCSFQIYAVPWQGTMTLSK STCQDA TRTRPLETEQKLISEEDLAANDILDYKDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6003_d11.zip



Restriction Sites: Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

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

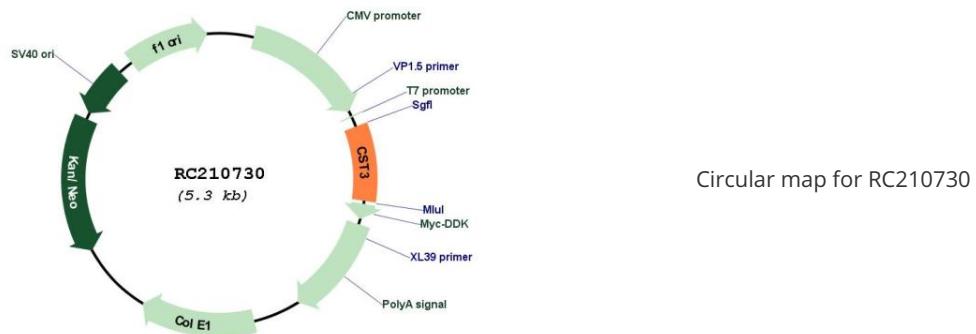
RefSeq Size: 929 bp

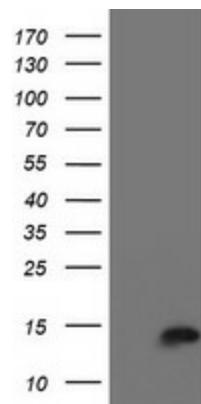
RefSeq ORF: 441 bp

Locus ID: 1471

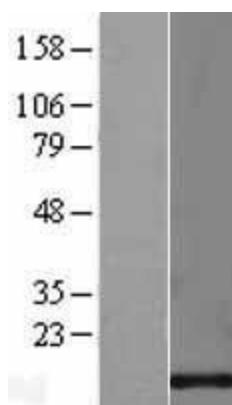
UniProt ID:	<u>P01034</u>
Cytogenetics:	20p11.21
Domains:	CY
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
MW:	15.8 kDa
Gene Summary:	<p>The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine 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:

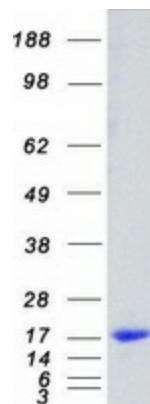




HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CST3 (Cat# RC210730, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CST3 (Cat# [TA504442])(1:2000).



Western blot validation of overexpression lysate (Cat# [LY400040]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210730 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CST3 protein (Cat# [TP310730]). The protein was produced from HEK293T cells transfected with CST3 cDNA clone (Cat# RC210730) using MegaTran 2.0 (Cat# [TT210002]).