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 RC209349

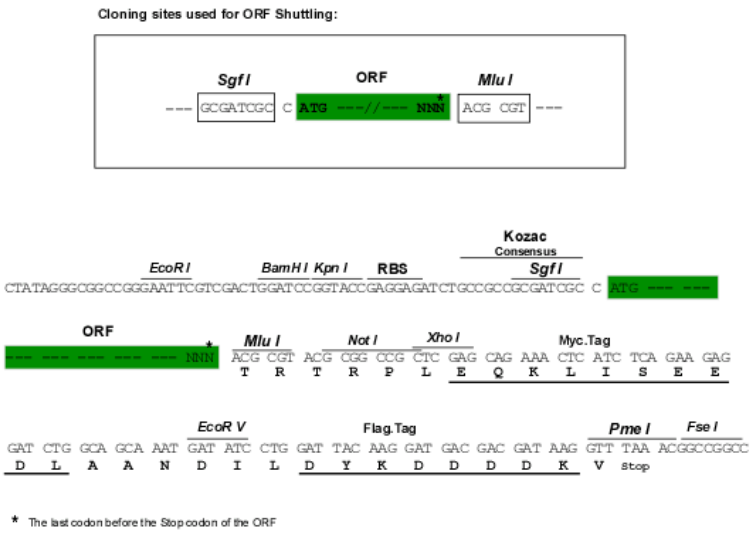
Cystatin S (CST4) (NM_001899) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cystatin S (CST4) (NM_001899) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cystatin S
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209349 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCCCGGCCTCTGTGTACCCTGCTACTCCTGATGGCTACCCTGGCTGGGGCTCTGGCCTCGAGCTCCA AGGAGGAGAATAGGATAATCCCAGGTGGCATCTATGATGCAGACCTCAATGATGAGTGGGTACAGCGTGC CCTTCACTTCGCCATCAGCGAGTACAACAAGGCCACCGAAGATGAGTACTACAGACGCCCGCTGCAGGTG CTGCGAGCCAGGGAGCAGACCTTTGGGGGGGTGAATTACTTCTTCGACGTAGAGGTGGGCCGCACCATAT GTACCAAGTCCCAGCCCAACTTGGACACCTGTGCCTTCCATGAACAGCCAGAACTGCAGAAGAAACAGTT GTGCTCTTTCGAGATCTACGAAGTTCCCTGGGAGGACAGAATGTCCCTGGTGAATTCCAGGTGTCAAGAA GCC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC209349 protein sequence Red=Cloning site Green=Tags(s) MARPLCTLLLLMATLAGALASSSKEENRIIPGGIYDADLNDEWVQRALHFAISEYNKATEDEYYRRPLQV LRAREQTFGGVNYFFDVEVGRTICTKSQPNLDTCAFHEQPELQKKQLCSFEIYEVPWEDRMSLVNSRCQE A TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6035_b09.zip
Restriction Sites:	SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_001899

ORF Size: 423 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001899.2, NP_001890.1

RefSeq Size: 736 bp

RefSeq ORF: 426 bp

Locus ID: 1472

UniProt ID: P01036

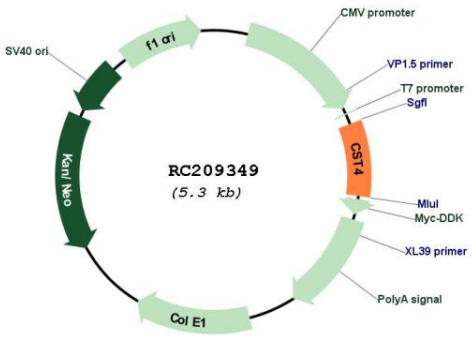
Cytogenetics: 20p11.21

Domains: CY

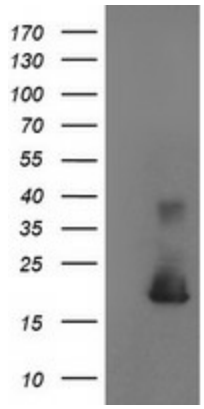
MW: 16.2 kDa

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. 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 a type 2 salivary cysteine peptidase inhibitor. The protein is an S-type cystatin, based on its high level of expression in saliva, tears and seminal plasma. The specific role in these fluids is unclear but antibacterial and antiviral activity is present, consistent with a protective function. [provided by RefSeq, Jul 2008]

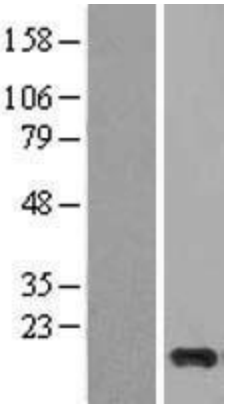
Product images:



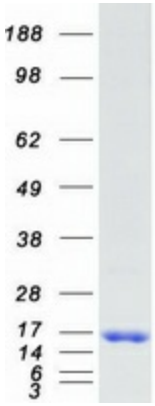
Circular map for RC209349



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CST4 (Cat# RC209349, 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-CST4(Cat# [TA504135]). Positive lysates [LY400707] (100ug) and [LC400707] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400707]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209349 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CST4 protein (Cat# [TP309349]). The protein was produced from HEK293T cells transfected with CST4 cDNA clone (Cat# RC209349) using MegaTran 2.0 (Cat# [TT210002]).