

Product datasheet for **RC203115**

Cystatin A (CSTA) (NM_005213) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cystatin A (CSTA) (NM_005213) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cystatin A
Synonyms: AREI; PSS4; STF1; STFA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203115 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATACCTGGAGGCTTATCTGAGGCCAAACCCGCCACTCCAGAAATCCAGGAGATTGTTGATAAGGTTA
AACACAGCTTGAAGAAAAACAAATGAGACTTATGGAAAATTGGAAGCTGTGCAGTATAAACTCAAGT
TGTTGCTGGAACAAATTACTACATTAAGGTACGAGCAGGTGATAATAAATATATGCACTTGAAAGTATTC
AAAAGTCTTCCCGACAAAATGAGGACTTGGTACTTACTGGATACCAGGTTGACAAAAACAAGGATGACG
AGCTGACGGGCTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203115 protein sequence
Red=Cloning site Green=Tags(s)
MIPGGLSEAKPATPEIQEIVDKVKPQLEEKTNETYGKLEAVQYKTQVVAGTNYIYIKVRAGDNKYMHLKVF
KSLPGQNEIDLVLTYQVQDKNKDDELTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6054_b10.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_005213

ORF Size: 294 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_005213.2](#)

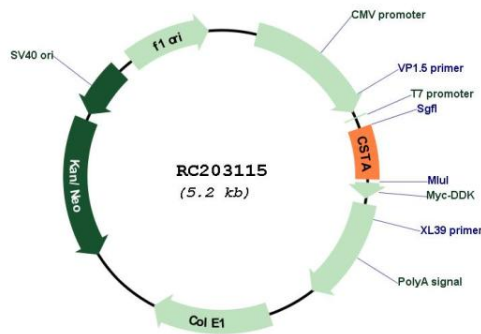
RefSeq Size: 838 bp

RefSeq ORF: 297 bp

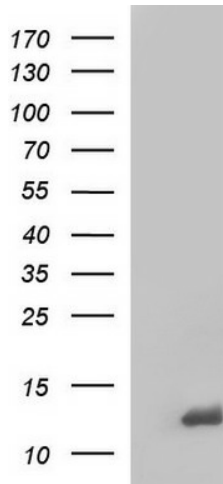
Locus ID: 1475
UniProt ID: [P01040](#)
Cytogenetics: 3q21.1
Domains: CY
MW: 11 kDa

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 kininogens. This gene encodes a stefin that functions as a cysteine protease inhibitor, forming tight complexes with papain and the cathepsins B, H, and L. The protein is one of the precursor proteins of cornified cell envelope in keratinocytes and plays a role in epidermal development and maintenance. Stefins have been proposed as prognostic and diagnostic tools for cancer. [provided by RefSeq, Jul 2008]

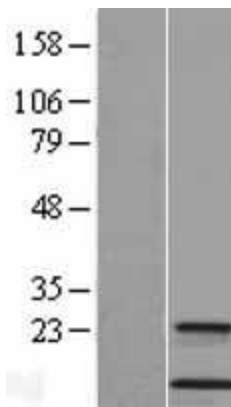
Product images:



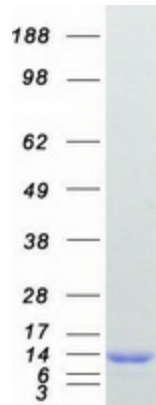
Circular map for RC203115



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CSTA (Cat# RC203115, 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-CSTA (Cat# [TA590198]). Positive lysates [LY401596] (100ug) and [LC401596] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401596]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203115 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CSTA protein (Cat# [TP303115]). The protein was produced from HEK293T cells transfected with CSTA cDNA clone (Cat# RC203115) using MegaTran 2.0 (Cat# [TT210002]).