

## Product datasheet for **RG203115**

### 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:** TurboGFP  
**Symbol:** Cystatin A  
**Synonyms:** AREI; PSS4; STF1; STFA  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG203115 representing NM\_005213  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATACCTGGAGGCTTATCTGAGGCCAAACCCGCCACTCCAGAAATCCAGGAGATTGTTGATAAGGTTA  
AACCCAGCTTGAAGAAAAACAAATGAGACTTATGGAAAATTGGAAGCTGTGCAGTATAAACTCAAGT  
TGTTGCTGGAACAAATTACTACATTAAGGTACGAGCAGGTGATAATAATATATGCACTTGAAAGTATTC  
AAAAGTCTTCCCGACAAAATGAGGACTTGGTACTTACTGGATACCAGGTTGACAAAAACAAGGATGACG  
AGCTGACGGGCTTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG203115 representing NM\_005213  
Red=Cloning site Green=Tags(s)  
MIPGGLSEAKPATPEIQEIVDKVKPQLEEKTNETYGKLEAVQYKTQVVAGTNYIYIKVRAGDNKYMHLKVF  
KSLPGQNEIDLVL TGYQVDKNKDELDTGF

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-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.

**RefSeq:** [NM\\_005213.2](#)

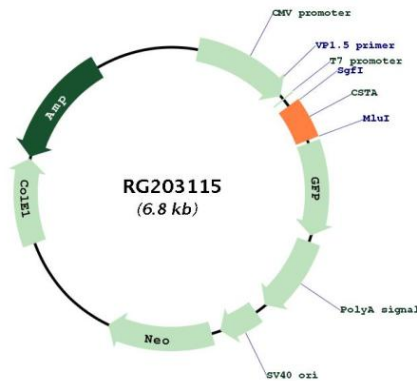
**RefSeq Size:** 838 bp

**RefSeq ORF:** 297 bp

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

**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 RG203115