

Product datasheet for **RG213409**

CTSA (NM_000308) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CTSA (NM_000308) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CTSA
Synonyms:	GLB2; GSL; NGBE; PPCA; PPGB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213409 representing NM_000308
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACTTCCAGTCCCCGGGCGCCTCCTGGAGAGCAAGGACGCGGGGAGCAGAGATGATCCGAGCCGCGC
 CGCGCCGCTGTTCTGCTGCTGCTGCTGCTGCTGCTAGTGTCTGGCGTCCCAGGCGAGGCGAGC
 CCCCAGCCAGGACGAGATCCAGCGCCTCCCCGGGCTGGCCAAGCAGCCGTCTTCCGCCAGTACTCCGGC
 TACCTCAAAGGCTCCGGCTCCAAGCACCTCCACTACTGGTTTGTGGAGTCCCAGAAGGATCCCGAGAACA
 GCCCTGTGGTGTCTTGGCTCAATGGGGTCCCAGGCTGCAGCTCACTAGATGGGCTCTCACAGAGCATGG
 CCCCTTCTGGTCCAGCCAGATGGTGTACCCTGGAGTACAACCCTATTCTTGGAACTGATTGCCAAT
 GTGTTATACCTGGAGTCCCAGCTGGGGTGGGCTTCTCTACTCCGATGACAAGTTTTATGCAACTAATG
 AACTGAGGTGCGCCAGAGCAATTTGAGGCCCTCAAGATTTCTCCGCCTCTTCCGGAGTACAAGAA
 CAACAACTTTCTGACCGGGGAGAGCTATGCTGGCATCTACATCCCCACCCTGGCCGTCTGGTTCATG
 CAGGATCCAGCATGAACCTTCAGGGGCTGGCTGTGGCAATGGACTCTCTCTATGAGCAGAATGACA
 ACTCCCTGGTCTACTTTGCCTACTACCATGGCCTTCTGGGGAACAGGCTTTGGTCTTCTCCAGACCCA
 CTGCTGCTCTCAAAACAAGTGTAACTTCTATGACAACAAAGACCTGGAATGCGTGACCAATCTTCAGGAA
 GTGGCCCGCATCGTGGGCAACTCTGGCCTCAACATCTACAATCTCTATGCCCCGTGTGCTGGAGGGTGC
 CCAGCCATTTTAGGTATGAGAAGGACACTGTTGTGGTCCAGGATTTGGGCAACATCTTCACTCGCCTGCC
 ACTCAAGCGGATGTGGCATCAGGCACTGCTGCGCTCAGGGGATAAAGTGCGCATGGACCCCCCTGCACC
 AACACAACAGCTGCTTCCACCTACCTCAACAACCCGTACGTGCGGAAGGCCCTCAACATCCCGGAGCAGC
 TGCCACAATGGGACATGTGCAACTTCTGGTAACTTACAGTACCGCCGTCTCTACCGAAGCATGAACTC
 CCAGTATCTGAAGCTGCTTAGCTCACAGAAATACCAGATCTATTATATAATGGAGATGTAGACATGGCC
 TGCAATTTTCATGGGGATGAGTGGTTTGTGGATTCCCTCAACCAGAAGATGGAGGTGCAGCGCCGCCCT
 GGTAGTGAAGTACGGGGACAGCGGGGAGCAGATTGCCGGCTTCGTGAAGGAGTTCTCCACATCGCCTT
 TCTCACGATCAAGGGCGCCGCCACATGGTTCCACCAGACAAGCCCTCGCTGCCTTACCATGTTCTCC
 CGTTCTGAACAAGCAGCCATAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213409 representing NM_000308
 Red=Cloning site Green=Tags(s)

MTSSPRAPPGEQGRGAEMIRAAPPPLLLLLLLLLLVSWASRGEAAPDQDEIQRLPGLAKQPSFRQYSG
 YLKGSGSKHLHYWFVESQKDPENSPVVLWLNNGPGCSSLDGLLTEHGPFVLPDGVLTLEYNPYSWNLIAN
 VLYLESPAGVGFYSDDKFYATNDTEVAQSNFEALQDFRFLFPEYKNNKFLFTGESYAGIYIPTLAVLVM
 QDPSMNLQGLAVGNLSSYEQNDNSLVYFAYYHGLLGNRLWSSLQTHCCSQNKCNFYDNKDLECVTNLQE
 VARIVGNSGLNIYNLYAPCAGGVPSHFVRYEKDTVVVQDLGNIFTRLPLKRMWHQALLRSGDKVRMDPPCT
 NTTAASTYLNNPYVRKALNIPEQLPQWDMCNFLVNLQYRRLYRSMNSQYLKLLSSQKYQILLYNGDVEDMA
 CNFMGDEWFVDSL NQKMEVQRRPWL VKYGDSGEQIAGFVKEF SHIAFLT IKGAGHMVPTDKPLAAF TMFS
 RFLNKQPY

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_000308

ORF Size: 1494 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_000308.3](#), [NP_000299.2](#)

RefSeq Size: 2254 bp

RefSeq ORF: 1443 bp

Locus ID: 5476

UniProt ID: [P10619](#)

Cytogenetics: 20q13.12

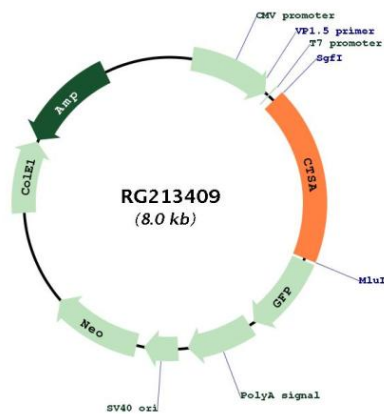
Domains: serine_carbpept

Protein Families: Druggable Genome, Protease

Protein Pathways: Renin-angiotensin system

Gene Summary: This gene encodes a member of the peptidase S10 family of serine carboxypeptidases. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate two chains that comprise the heterodimeric active enzyme. This enzyme possesses deamidase, esterase and carboxypeptidase activities and acts as a scaffold in the lysosomal multienzyme complex. Mutations in this gene are associated with galactosialidosis. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RG213409