

Product datasheet for **RG204881**

Cathepsin G (CTSG) (NM_001911) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin G (CTSG) (NM_001911) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cathepsin G
Synonyms:	CATG; CG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204881 representing NM_001911 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCCACTCCTGCTTCTGCTGGCCTTTCTCCTACCCACTGGGGCTGAGGCAGGGGAGATCATCGGAG
GCCGGGAGAGCAGGCCCACTCCCGCCCTACATGGCGTATCTTCAGATCCAGAGTCCAGCAGGTCCAGAG
CAGATGTGGAGGGTTCTGGTGCAGAAAGACTTTGTGCTGACAGCAGCTCATTGCTGGGGAAGCAATATA
AATGTCACCCTGGGCGCCACAATATCCAGAGACGGGAAAACACCCAGCAACACATCACTGCGCGCAGAG
CCATCCGCCACCCTCAATATAATCAGCGGACCATCCAGAATGACATCATGTTATTGCAGCTGAGCAGAAG
AGTCAGACGGAATCGAAACGTGAACCCAGTGGCTCTGCCTAGAGCCAGGAGGGACTGAGACCCGGGACG
CTGTGCACTGTGGCCGGCTGGGGCAGGGTCAGCATGAGGAGGGGAACAGATACACTCCGAGAGGTGCAGC
TGAGAGTGCAGAGGGATAGGCAGTGCCTCCGCATCTTCGGTTCCTACGACCCCGAAGGCAGATTTGTG
GGGGGACCGCGGGAACGGAAGGCTGCCTCAAGGGGATTCCGGAGGCCCTGCTGTGTAACAATGTG
GCCCACGGCATCGTCTCCTATGGAAAGTCGTAGGGGTTCCAGAAAGTCTTACCAGGGTCTCAAGTT
TCCTGCCCTGGATAAGGACAACAATGAGAAGCTTCAAAGTCTGGATCAGATGGAGACCCCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204881 representing NM_001911
 Red=Cloning site Green=Tags(s)

MQPLLLLLAFLLPTGAEAGEIIGGRESRPHSRPYMAYLQIQSPAGQSRCCGGFLVREDFVL TAAHCWGSNI
 NVTLGAHNIQRRENTQQHITARRAIRHPQYNQRTIQNDIMLLQLSRRVRRNRNVNPVALPRAQEGLRPGT
 LCTVAGWGRVSMRRGDTLREVQLRVQRDRQCLRIFGSYDPRRQICVGDRRERKAFAFKGDSGGPLLCNNV
 AHGIVSYGKSSGVPPEVFRVSSFLPWIRTTMRSFKLLDQMETPL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001911

ORF Size: 765 bp

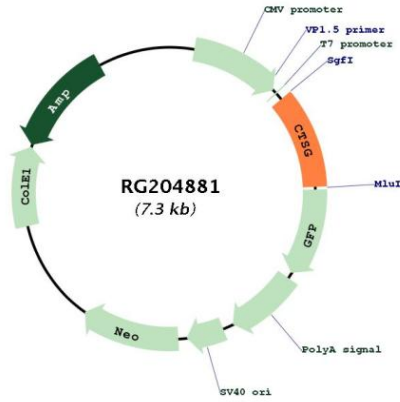
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_001911.3
RefSeq Size:	924 bp
RefSeq ORF:	768 bp
Locus ID:	1511
UniProt ID:	P08311
Cytogenetics:	14q12
Domains:	Tryp_SPc
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Lysosome, Neuroactive ligand-receptor interaction, Renin-angiotensin system, Systemic lupus erythematosus
Gene Summary:	The protein encoded by this gene, a member of the peptidase S1 protein family, is found in azurophil granules of neutrophilic polymorphonuclear leukocytes. The encoded protease has a specificity similar to that of chymotrypsin C, and may participate in the killing and digestion of engulfed pathogens, and in connective tissue remodeling at sites of inflammation. In addition, the encoded protein is antimicrobial, with bacteriocidal activity against <i>S. aureus</i> and <i>N. gonorrhoeae</i> . Transcript variants utilizing alternative polyadenylation signals exist for this gene. [provided by RefSeq, Sep 2014]

Product images:



Circular map for RG204881