

Product datasheet for **RC204881**

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:	Myc-DDK
Symbol:	Cathepsin G
Synonyms:	CATG; CG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204881 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCCACTCCTGCTTCTGCTGGCCTTTCTCCTACCCACTGGGGCTGAGGCAGGGGAGATCATCGGAG
GCCGGGAGAGCAGGCCCACTCCCGCCCTACATGGCGTATCTTCAGATCCAGAGTCCAGCAGGTCCAGAG
CAGATGTGGAGGGTTCTGGTGCAGAGAAGACTTTGTGCTGACAGCAGCTCATTGCTGGGGAAGCAATATA
AATGTCACCCTGGGCGCCACAATATCCAGAGACGGGAAAACACCCAGCAACACATCACTGCGCGCAGAG
CCATCCGCCACCCTCAATATAATCAGCGGACCATCCAGAATGACATCATGTTATTGCAGCTGAGCAGAAG
AGTCAGACGGAATCGAAACGTGAACCCAGTGGCTCTGCCTAGAGCCAGGAGGGACTGAGACCCGGGACG
CTGTGCACTGTGGCCGGCTGGGGCAGGGTCAGCATGAGGAGGGGAACAGATACACTCCGAGAGGTGCAGC
TGAGAGTGCAGAGGGATAGGCAGTGCCTCCGCATCTTCGGTTCCTACGACCCCGAAGGCAGATTTGTGT
GGGGGACCGCGGGAACGGAAGGCTGCCTCAAGGGGATTCCGGAGGCCCTGCTGTGTAACAATGTG
GCCCACGGCATCGTCTCCTATGGAAAGTCGTAGGGGTTCTCCAGAAGTCTTACCAGGGTCTCAAGTT
TCCTGCCCTGGATAAGGACAACAATGAGAAGCTTCAAAGTCTGGATCAGATGGAGACCCCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204881 protein sequence
Red=Cloning site Green=Tags(s)

MQPLLLLLAFLLPTGAEAGEIIGGRESRPHSRPYMAYLQIQSPAGQSRGGLVREDFVLTAAHCWGSNI
 NVTLGAHNIQRRENTQQHITARRAIRHPQYNQRTIQNDIMLLQLSRVRRNRNVPVALPRAQGLRPGT
 LCTVAGWGRVSMRRGDTLREVQLRVQRDRQCLRIFGSDPRRQICVGDRRERKAAFKGDSSGGLLCNNV
 AHGIVSYGKSSGVPPEVFTRVSSFLPWIRTTMRSFKLLDQMETPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6062_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001911

ORF Size: 765 bp

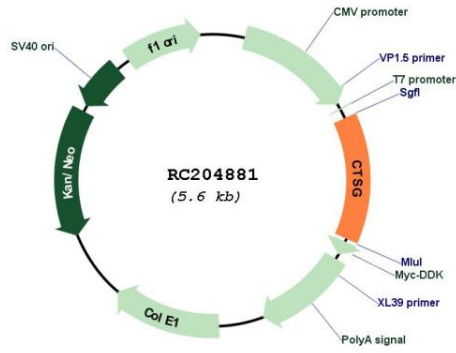
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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
MW:	28.8 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC204881