

Product datasheet for RC214873

CMA1 (NM_001836) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CMA1 (NM_001836) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CMA1
Synonyms:	chymase; CYH; MCT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214873 representing NM_001836 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCTTCTTCCTCTCCCCCTGCTGCTCTTTCTTTGTGCTCCAGAGCTGAAGCTGGGGAGATCATCG
GGGGCACAGAATGCAAGCCACATTCGGCCCTACATGGCCTACCTGGAAATTGAACTTCCAACGGTCC
CTCAAAATTTTGGTGGTTTCTTATAAGACGGAACCTTGTGCTGACGGCTGCTCATTGTGCAGGAAGG
TCTATAACAGTCACCCTTGGAGCCATAACATAACAGAGGAAGAAGACACATGGCAGAAGCTTGAGGTTA
TAAAGCAATTCGTCATCAAAATATAACACTTCTACTCTTACCACGATATCATGTTACTAAAGTTGAA
GGAGAAAGCCAGCCTGACCCTGGCTGTGGGACTCCCTTCCCATCACAATCAACTTTGCCCACCT
GGGAGAATGTGCCGGTGGCTGGCTGGGAAGAACAGGTGTGTTGAAGCCGGGCTCAGACTCTGCAAG
AGGTGAAGCTGAGACTCATGGATCCCCAGGCCTGCAGCCACTTCAGAGACTTTGACCACAATCTTCAGCT
GTGTGTGGGCAATCCCAGGAAGACAAAATCTGCATTTAAGGGAGACTCTGGGGCCCTCTTCTGTGTGCT
GGGTGGCCAGGGCATCGTATCCTATGGACGGTCGGATGCAAAGCCCTGCTGTCTTACCCGAATCT
CCATTACCGCCCTGGATCAACCAGATCTGCAGGCAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC214873 representing NM_001836
Red=Cloning site Green=Tags(s)

MLLLPLPLLLFLLCSRAEAGEIIGGTECKPHSRPYMAYLEIVTSNGPSKFCGGFLIRRNFVLTAAHCAGR
 SITVTLGAHNITEEDTWQKLEVIKQFRHPKYNTSTLHHDIMLLKLKEKASLTLAVGTLPPFSQFNFP
 GRMCRVAGWGRGVLKPGSDTLQEVKLRMLDPQACSHFRDFDHNLQLCVGNPRKTKSAFKGDSGGPLLCA
 GVAQGIYSYGRSDAKPPAVFTRISHYRPWINQILQAN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6110_g02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001836

ORF Size: 741 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_001836.2](#)

RefSeq Size: 744 bp

RefSeq ORF: 744 bp

Locus ID: 1215

UniProt ID: [P23946](#)

Cytogenetics: 14q12

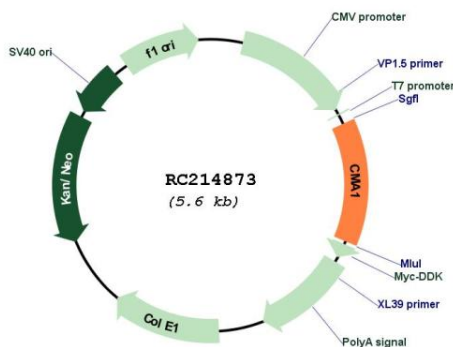
Protein Families: Druggable Genome, Protease, Secreted Protein

Protein Pathways: Renin-angiotensin system

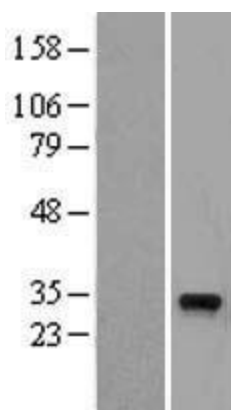
MW: 27.1 kDa

Gene Summary: This gene encodes a chymotryptic serine proteinase that belongs to the peptidase family S1. It is expressed in mast cells and is thought to function in the degradation of the extracellular matrix, the regulation of submucosal gland secretion, and the generation of vasoactive peptides. In the heart and blood vessels, this protein, rather than angiotensin converting enzyme, is largely responsible for converting angiotensin I to the vasoactive peptide angiotensin II. Alternative splicing results in multiple variants. [provided by RefSeq, Apr 2015]

Product images:



Circular map for RC214873



Western blot validation of overexpression lysate (Cat# [LY400698]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214873 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).