

Product datasheet for RC203799

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OriGene Technologies, Inc.

RANTES (CCL5) (NM_002985) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: RANTES (CCL5) (NM_002985) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: RANTES

Synonyms: D17S136E; eoCP; RANTES; SCYA5; SIS-delta; SISd; TCP228

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC203799 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203799 protein sequence

Red=Cloning site Green=Tags(s)

MKVSAAALAVILIATALCAPASASPYSSDTTPCCFAYIARPLPRAHIKEYFYTSGKCSNPAVVFVTRKNR

QVCANPEKKWVREYINSLEMS

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6023 d11.zip

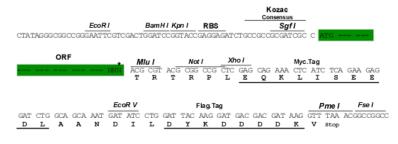
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_002985

ORF Size: 273 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 customercom 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).

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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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 002985.3</u>

RefSeq Size: 1237 bp

 RefSeq ORF:
 276 bp

 Locus ID:
 6352

 UniProt ID:
 P13501

 Cytogenetics:
 17q12

 Domains:
 IL8

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Cytosolic DNA-sensing

pathway, Epithelial cell signaling in Helicobacter pylori infection, NOD-like receptor signaling

pathway, Prion diseases, Toll-like receptor signaling pathway

MW: 10 kDa

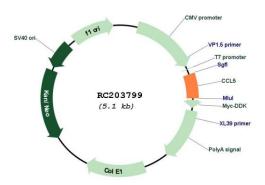
Gene Summary: This gene is one of several chemokine genes clustered on the q-arm of chromosome 17.

Chemokines form a superfamily of secreted proteins involved in immunoregulatory and inflammatory processes. The superfamily is divided into four subfamilies based on the arrangement of the N-terminal cysteine residues of the mature peptide. This chemokine, a member of the CC subfamily, functions as a chemoattractant for blood monocytes, memory T helper cells and eosinophils. It causes the release of histamine from basophils and activates eosinophils. This cytokine is one of the major HIV-suppressive factors produced by CD8+ cells. It functions as one of the natural ligands for the chemokine receptor chemokine (C-C motif) receptor 5 (CCR5), and it suppresses in vitro replication of the R5 strains of HIV-1, which use CCR5 as a coreceptor. Alternative splicing results in multiple transcript variants that encode

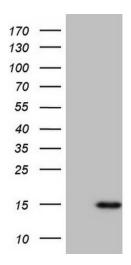
different isoforms. [provided by RefSeq, Jul 2013]



Product images:

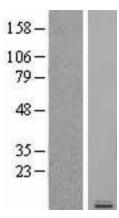


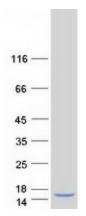
Circular map for RC203799



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CCL5 (Cat# RC203799, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CCL5 (Cat# [TA806330]). Positive lysates [LY401044] (100ug) and [LC401044] (20ug) can be purchased separately from OriGene.







Western blot validation of overexpression lysate (Cat# [LY401044]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203799 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified CCL5 protein (Cat# [TP303799]). The protein was produced from HEK293T cells transfected with CCL5 cDNA clone (Cat# RC203799) using MegaTran 2.0 (Cat# [TT210002]).