

Product datasheet for TP303799M

OriGene Technologies, Inc.

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RANTES (CCL5) (NM_002985) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human chemokine (C-C motif) ligand 5 (CCL5), 100 µg

Species: Human Expression Host: HEK293T

Expression cDNA Clone >RC203799 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MKVSAAALAVILIATALCAPASASPYSSDTTPCCFAYIARPLPRAHIKEYFYTSGKCSNPAVVFVTRKNR

QVCANPEKKWVREYINSLEMS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 7.8 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Bioactivity: Binding assay (PMID: 28986561)

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 002976

Locus ID: 6352

UniProt ID: <u>P13501</u>, <u>D0EI67</u>

RefSeq Size: 1237





Cytogenetics: 17q12

RefSeq ORF: 273

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

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]

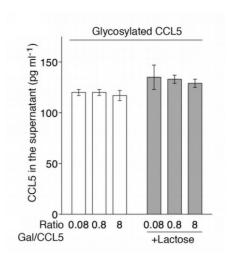
Protein Families: Druggable Genome, Secreted Protein, Transmembrane

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

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

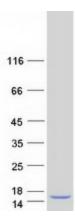
pathway, Prion diseases, Toll-like receptor signaling pathway

Product images:



Human galectin-3 does not bind glycosylated CCL5, and lactose, a sugar known to inhibit glycan/galectin-3 binding, has no effect. CCL5 (OriGene [TP303799]) was incubated with different ratios of galectin-3-coated beads in the presence or absence of 100 mM lactose, and a bioplex assay measured CCL5 O-glycosylation in the supernatant. Figure cited from Nat Commun, PMID: 28986561





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]).