Data Sheet (Cat.No.TMPY-01072)

TargetMol

CCL5 Protein, Human, Recombinant (His & mucin)

General Information

Synonyms:	D17S136E;SCYA5;SIS-δ;SISd;SIS-delta;RANTES;chemokine (C-C motif) ligand 5;TCP228;eoCP
Protein Construction:	A DNA sequence encoding the human RANTES (NP_002976.2) (Met 1-Ser 91) was fused with a C-terminal human Fractalkine mucin-stalk (Phe 103-Gln 341) followed by a polyhistidine tag. Predicted N terminal: Ser 24
Species:	Human
Expression Host:	HEK293 Cells
Accession:	D0EI67
Molecular Weight:	34 kDa (predicted); 50-80 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

Chemokines are a family of small chemotactic cytokines, or proteins secreted by cells. Chemokines share the same structure similarities such as small size, and the presence of four cysteine residues in conserved locations in order to form their 3-dimensional shape. Some of the chemokines are considered pro-inflammatory which can be induced to recruit cells of the immune system to a site of infection during an immune response, while others are

considered homeostatic and are implied in controlling the migration of cells during normal processes of tissue maintenance and development. There are four members of the chemokine family: C-C kemokines, C kemokines, CXC kemokines and CX3C kemokines. The C-C kemokines have two cysteines nearby the amino terminus. There have been at least 27 distinct members of this subgroup reported for mammals, called C-C chemokine ligands-1 to 28. Chemokin ligand 5(CCL5) is chemotactic for T cells, basophils and eosinophils. Chemokin ligand 5(CCL5) has been considered a HIV-supressor secreted by CD8+T cells and other immune cells. Chemokin ligand 5(CCL5) is a key to activating recruit leukocytes into inflammatory sites and in the presence of particular cytokines released by T cells, it can change the NK cells into CHAK cells.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy

Reference

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Biber K,et al.(2003) Expression of L-CCR in HEK 293 cells reveals functional responses to CCL2, CCL5, CCL7, and CCL8. Journal of Leukocyte Biology. 74 (2): 243-51.

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