Data Sheet (Cat.No.TMPY-03071)

TargetMol

I-309/CCL1 Protein, Human, Recombinant

General Information

Synonyms:	SISe;P500;TCA3;I-309;chemokine (C-C motif) ligand 1;SCYA1
Protein Construction:	A DNA sequence encoding the human CCL1 (P22362) (Lys24-Lys96) was expressed, with a N-terminal Met. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	P22362
Molecular Weight:	8.7 kDa (predicted); 9 kDa (reducing conditions)

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:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 40% acetonitrile, 0.1% TFA, 20% H2O. 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

CCL1 or chemokine (C-C motif) ligand 1, also known as I-309 or TCA-3, is a member of the chemokine (C-C motif) ligand family. The C-C chemokines 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 (CCL)-1 to 28. I-309/CCL1/TCA-3 interacts with the G protein-linked transmembrane chemokine receptors CCR8 and induces biochemical events that may result in the control of chemotaxis, proliferation, apoptosis and adhesion. It has been

demonstrated that I-309/CCL1/TCA-3 displays chemotactic activity for monocytes and other cell types such as NK cells and dendritic cells, but not for neutrophils. Furthermore, as the only known physiological ligand for CCR8, I-309/CCL1/TCA-3 was identified as a potent inhibitor of HIV-1 envelope-mediated cell-cell fusion and virus infection. I-309/CCL1/TCA-3 induces significant levels of LTC4 from elicited eosinophils.

Reference

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Fritzsche FR,et al.(2008) CD146 protein in prostate cancer: revisited with two different antibodies. Pathology. 40 (5): 457-64.

Bidlingmaier S,et al.(2009) Identification of MCAM/CD146 as the target antigen of a human monoclonal antibody that recognizes both epithelioid and sarcomatoid types of mesothelioma. Cancer Res. 69(4): 1570-7.

Boneberg EM,et al.(2009) Soluble CD146 is generated by ectodomain shedding of membrane CD146 in a calcium-induced, matrix metalloprotease-dependent process. Microvasc Res. 78(3): 325-31.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481