Data Sheet (Cat.No.TMPY-02538)

TargetMol

I-309/CCL1 Protein, Mouse, Recombinant (hFc)

General Information

Synonyms:	BF534335;chemokine (C-C motif) ligand 1;Scya1;I-309;Tca-3
Protein Construction:	A DNA sequence encoding the secreted form of mouse CCL1 isoform 1 (P10146-1) (Lys 24-Cys 92) was fused with the Fc region of human IgG1 at the N-terminus. Predicted N terminal: Glu
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	P10146-1
Molecular Weight:	36.2 kDa (predicted); 44 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:	> 92 % 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:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

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.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry 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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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.

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