Data Sheet (Cat.No.TMPY-00564)

TargetMol

MCP-4 Protein, Human, Recombinant (His)

General Information

Synonyms:	MCP-4;CCL13;SCYL1;NCC-1;MCP4;NCC1;CKb10;SCYA13;chemokine (C-C motif) ligand 13
Protein Construction:	A DNA sequence encoding human CCL13 (NP_005399.1) (Gln24-Thr98) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Gln 24
Species:	Human
Expression Host:	P. pastoris (Yeast)
Accession:	Q99616
Molecular Weight:	10 kDa (predicted); 14 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 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.

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

Monocyte Chemoattractant Proteins 4 (MCP-4/CCL13) is a member of a distinct, structurally-related subclass of CC chemokines mainly involved in recruitment of eosinphils to inflammatory sites. CCL13/MCP-4, is a CC family chemokine that is chemoattractant for eosinophils, basophils, monocytes, macrophages, immature dendritic cells, and T cells, and its capable of inducing crucial immuno-modulatory responses through its effects on epithelial, muscular and endothelial cells. Similar to other CC chemokines, CCL13 binds to several chemokine receptors

(CCR1, CCR2 and CCR3), allowing it to elicit different effects on its target cells. A number of studies have shown that CCL13 is involved in many chronic inflammatory diseases, in which it functions as a pivotal molecule involved in the selective recruitment of cell lineages to the inflamed tissues and their subsequent activation. MCP-4/CCL13 is secreted from chondrocytes and activates the proliferation of rheumatoid synovial cells, thereby leading to joint destruction in RA. The interferon-gamma in combination with interleukin-1beta/tumor necrosis factor-alpha activates the production of MCP-4/CCL13 from chondrocytes in RA joints, and that secreted MCP-4/CCL13 enhances fibroblast-like synoviocyte proliferation by activating the extracellular signal-regulated kinase mitogen-activated protein kinase cascade. CCL13 may have some role in the pathogenesis of systemic sclerosis (SSc).

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