Data Sheet (Cat.No.TMPY-02125)

TargetMol

CCL6 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	Scya6;MRP-1;c10;RP23-320E6.4;chemokine (C-C motif) ligand 6
Protein Construction:	A DNA sequence encoding the mouse CCL6 (P27784) (Met 1-Ala 116) was fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Gly 22
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	P27784
Molecular Weight:	12 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:	> 90 % 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.

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

Chemokine (C-C motif) ligand 6 (CCL6), also known as C-C chemokine C10 has only been identified in rodents, which is a small cytokine belonging to the CC chemokine family, beta-chemokine subfamily. C-C chemokine C10 is involved in the chronic stages of host defense reactions. C10 chemokine rapidly promotes disease resolution in the cecal ligation and puncture (CLP) model through its direct effects on the cellular events critically involved in host defense during septic peritonitis. CCL6 appears to contribute to the macrophage infiltration that is independent of

other CC chemokines. C10 is a prominent chemokine expressed in the central nervous system in experimental inflammatory demyelinating disease, also acts as a potent chemotactic factor for the migration of these leukocytes to the brain. CCL6 may be a mediator released by microglia for cell-cell communication under physiological as well as pathological conditions of CNS. Additionally, the chemokine CCL6 may alter tumor behavior by relieving its growth factor dependency and by promoting invasiveness as a result of local tissue apoptosis.

Reference

Asensio VC, et al. (1999) C10 is a novel chemokine expressed in experimental inflammatory demyelinating disorders that promotes recruitment of macrophages to the central nervous system. Am J Pathol. 154(4): 1181-91.
Steinhauser ML, et al. (2000) Chemokine C10 promotes disease resolution and survival in an experimental model of bacterial sepsis. Infect Immun. 68(11): 6108-14.
Yi F, et al. (2003) The CCL6 chemokine is differentially regulated by c-Myc and L-Myc, and promotes tumorigenesis and metastasis. Cancer Res. 63(11): 2923-32.
LaFleur AM, et al. (2004) Role of CC chemokine CCL6/C10 as a monocyte chemoattractant in a murine acute peritonitis. Mediators Inflamm. 13(5-6): 349-55.
Kanno M, et al. (2005) Functional expression of CCL6 by rat microglia: a possible role of CCL6 in cell-cell communication. J Neuroimmunol. 167(1-2): 72-80.