Datasheet for ABIN2666885

Ccl12 Protein (AA 23-104)

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Overview

Quantity:	10 µg
Target:	Ccl12
Protein Characteristics:	AA 23-104
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Flow Cytometry (FACS)

Product Details

Purity:	> 98 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 0.01 ng per µg cytokine as determined by the LAL method.

Target Details

Target:	Ccl12
Alternative Name:	CCL12 (Ccl12 Products)
Background:	Mouse CCL12 belongs to the CC chemokine family and is most closely related to human CCL2 (MCP-1) in structure (66 % amino acid identity). CCL12 binds to cell surface receptor CCR2, a human CCL2 primary receptor, and can induce migration and Ca2+ flux. CCL12 is a potent chemoattractant for peripheral blood monocytes but only has weak activity on eosinophils at

Target Details

	high doses. CCL12 is produced by macrophages during early allergic reactions and infections. During murine MCV infection, bone marrow F4/80 (+) cells can produce high levels of CCL12. The expression of CCL12 can also be upregulated by bacterial infections including pneumococcal meningitis and polymicrobial septic peritonitis. LPS can induce the expression of CCL12 in liver macrophages (Kupffer cells) in vivo. CCL12 is involved in the pathogenesis of pulmonary fibrosis by recruiting fibrocytes to the injury site and enhancing fibrotic responses. Also, CCL12 is implicated in liver and kidney fibrosis. It has also been shown that hypoxia inducible factor 1 is involved in hypoxia-induced upregulation of CCL12 in astrocytes. In addition, CCL12 is involved in joint and growth plate development.
Molecular Weight:	The 82 amino acid recombinant protein has a predicted molecular mass of approximately 10 kDa. The DTT-reduced protein migrates at approximately 13 kDa and non-reduced protein migrates at approximately 15 kDa by SDS-PAGE. The N-terminal amino acid is Gly.
Pathways:	Cellular Response to Molecule of Bacterial Origin

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Biological activity: Bioactivity was measured by its ability to chemoattract THP-1 cells in a dose dependent manner.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Reconstitution:	For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10 µg/mL in sterile buffer (PBS, HPBS, DPBS, and EBSS) containing carrier protein such as 1 % BSA or HSA. After dilution, the cytokine can be stored between 2 °C and 8 °C for one month or from -20 °C to -70 °C for up to 3 months.
Buffer:	0.22 µm filtered protein solution is in PBS.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Unopened vial can be stored between 2°C and 8°C for three months, at -20°C for six months, or at -70°C for one year.