

Recombinant Human CCL3 (MIP-1 α) (carrier-free)

Catalog# / Size	759502 / 10 μ g 759504 / 25 μ g 759506 / 100 μ g
Regulatory Status	RUO
Other Names	Macrophage inflammatory protein 1-alpha (MIP-1-alpha), LD78-alpha, SCYA3, G0S19-1
Description	CCL3 is a chemokine belonging to the CC chemokine family. CCL3 is involved in activation and recruitment of lymphocytes, monocytes, and granulocytes during acute inflammation. In addition to regulating leukocyte migration, CCL3 enhances IFN- γ secretion from activated T cells and thus induces Th1 response. Moreover, CCL3 has been reported to be involved in susceptibility of HIV infection and disease progression of AIDS. Human CCL3 is also demonstrated to inhibit proliferation of hematopoietic progenitor stem cells.

Product Details

Source	Human CCL3, amino acids Ala27-Ala92 (Accession# NM_002983.2) was expressed in <i>E. coli</i> .
Molecular Mass	The 66 amino acid recombinant protein has a predicted molecular mass of approximately 7.5 kD. The DTT-reduced protein migrates at approximately 12 kD and non-reduced protein migrates at approximately 13 kD by SDS-PAGE. The N-terminal amino acid is Ala.
Purity	>98%, as determined by Coomassie stained SDS-PAGE.
Formulation	0.22 μ m filtered protein solution is in 4 mM HCl.
Endotoxin Level	Less than 0.01 ng per μ g cytokine as determined by the LAL method.
Concentration	10 and 25 μ g sizes are bottled at 200 μ g/mL. 100 μ g size and larger sizes are lot-specific and bottled at the concentration indicated on the vial. To obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.
Storage & Handling	Unopened vial can be stored between 2°C and 8°C for up to 2 weeks, at -20°C for up to six months, or at -70°C or colder until the expiration date. For maximum results, quick spin vial prior to opening. The protein can be aliquoted and stored at -20°C or colder. Stock solutions can also be prepared at 50 - 100 μ g/mL in appropriate sterile buffer, carrier protein such as 0.2 - 1% BSA or HSA can be added when preparing the stock solution. Aliquots can be stored between 2°C and 8°C for up to one week and stored at -20°C or colder for up to 3 months. Avoid repeated freeze/thaw cycles.
Activity	The ED ₅₀ is 1 - 10 ng/mL as determined by its property to chemoattract Baf3-hCCR5 stable line in a dose dependent manner.
Recommended Usage	Bioassay
Application Notes	BioLegend carrier-free recombinant proteins provided in liquid format are shipped on blue-ice. Our comparison testing data indicates that when handled and stored as recommended, the liquid format has equal or better stability and shelf-life compared to commercially available lyophilized proteins after reconstitution. Our liquid proteins are verified in-house to maintain activity after shipping on blue ice and are backed by our 100% satisfaction guarantee . If you have any concerns, contact us at tech@biolegend.com .

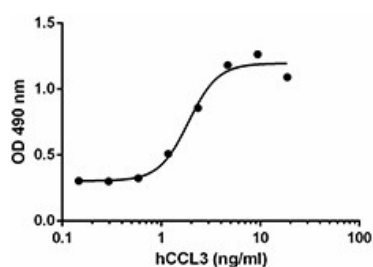
Antigen Details

Structure	CC chemokine.
Distribution	T lymphocytes, B lymphocytes, monocytes, macrophage, dendritic cells, NK cells, neutrophils, basophils, eosinophils, platelets, fibroblasts, osteoblasts, astrocytes, vascular smooth muscle cells, fetal microglia, and epithelial cells.
Function	CCL3 chemokine is a chemoattractant which recruits and activates leukocytes to sites of infection

or inflammation, resulting in an enhanced local inflammatory response.

Interaction	T lymphocytes, monocytes, NK cells, immature dendritic cells, neutrophils, basophils, eosinophils, platelets, and coronary epithelial cells.
Ligand/Receptor	CCR1, CCR4, and CCR5.
Cell Type	Hematopoietic stem and progenitors
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience, Stem Cells
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none">1. Menten P, <i>et al.</i> 2002. <i>Cytokine Growth Factor Rev.</i> 13:455.2. Blum S, <i>et al.</i> 1990. <i>DNA Cell. Biol.</i> 9:589.3. Czaplewski LG, <i>et al.</i> 1999. <i>J. Biol. Chem.</i> 274:16077.4. Paximadis M, <i>et al.</i> 2009. <i>Int. J. Immunogenet.</i> 36:21.5. Cocchi F, <i>et al.</i> 1995. <i>Science</i> 270:1811.6. Meddows-Taylor S, <i>et al.</i> 2006. <i>J. Gen. Virol.</i> 87:2055.
Gene ID	6348

Product Data



Baf3-hCCR5 cells chemoattracted by human CCL3.

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