Cytokines

Mouse Recombinant MIG (CXCL9)

Monokine induced by interferon-gamma

Catalog #	78177	5 µg
	78177.1	25 µg

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Product Description

Monokine induced by interferon-gamma (MIG), or CXCL9, is a member of the CXC chemokine family. MIG is closely related to two other chemokines: CXCL10 and CXCL11, all of which signal through the CXCR3 receptor (Ding et al.). MIG is secreted by a variety of immune cells including T cells, NK cells, dendritic cells, macrophages, and eosinophils, as well as non-immune cells including hepatic stellate cells, preadipocytes, thyrocytes, endothelial cells, tumor cells, fibroblasts, and glial cells of the central nervous system. MIG has also been shown to act as a chemoattractant for activated T cells and for tumor-infiltrating leukocytes (TILs), but not for neutrophils or for monocytes. MIG has also been reported to be both a tumor suppressor and tumor promoter in various types of cancer.

Product Information

Alternative Names:	Chemokine (C-C-C motif) ligand 9, CMK, crg-10, CXCL9, Gamma interferon-induced monokine, Humig, M119, MIG, Monokine induced by gamma-interferon, SCYB9, Small inducible cytokine B9
Accession Number:	P18340
Amino Acid Sequence:	MTLVIRNARC SCISTSRGTI HYKSLKDLKQ FAPSPNCNKT EIIATLKNGD QTCLDPDSANVKKLMKEWEK KISQKKKQKR GKKHQKNMKN RKPKTPQSRR RSRKTT
Predicted Molecular Mass:	12.3 kDa
Species:	Mouse
Cross Reactivity:	Reported to be species-specific
Formulation:	Lyophilized after dialysis against phosphate-buffered saline.
Source:	E. coli

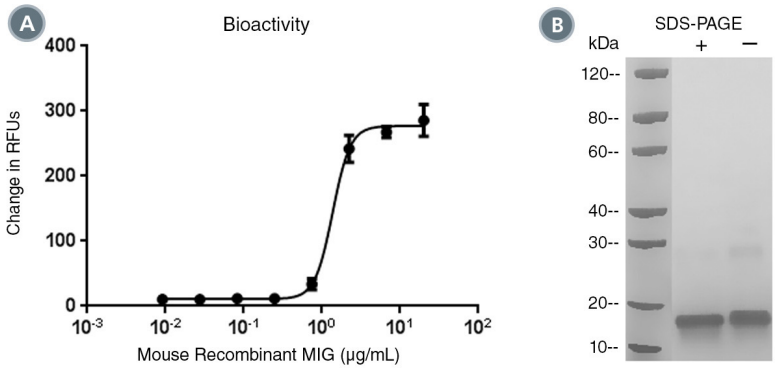
Specifications

Activity:	The specific activity is ≥ 5 x 10^2 units/mg (EC50 ≤ 2 µg/mL) as determined by a Ca2+ mobilization assay using CHO-K1 cells expressing human Gα15 and mouse CXCR3.
Purity:	≥ 95%
Endotoxin Level:	Measured by kinetic Limulus amebocyte lysate (LAL) analysis and is ≤ 0.2 EU/µg protein.

Preparation and Storage

Storage:	Store at -80°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. OPTIONAL: After reconstitution, if product will not be used immediately, dilute with concentrated bovine serum albumin (BSA) to a final BSA concentration of 0.1%. The effect of storage of stock solution on product performance should be tested for each application. As a general guide, do not store at 2 - 8°C for more than 1 week or at -20°C to -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Mouse Recombinant MIG (CXCL9) was tested using a Ca2+ mobilization assay in CHO-K1 cells stably expressing Gα15 and CXCR3. Calcium mobilization was measured using a fluorometric assay method. The EC50 is defined as the effective concentration of the growth factor at which calcium mobilization is at 50% of maximum. The EC50 in the example above is less than 2 µg/mL.
(B) 2 µg of Mouse Recombinant MIG (CXCL9) was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Mouse Recombinant MIG (CXCL9) has a predicted molecular mass of 12.3 kDa.

Related Products

For a complete list of cytokines, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/cytokines or contact us at techsupport@stemcell.com.

References

Ding Q et al. (2016) CXCL9: evidence and contradictions for its role in tumor progression. Cancer Med 5(11): 3246–59.