

Mouse CXCL2 / GRO2 / MIP-2 (His & SUMO Tag)

Catalog Number: 50070-M28E



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

CINC-2a, GROb, Gro2, MIP-2, MIP-2a, Mgsa-b, Mip2, Scyb, Scyb2

Protein Construction:

A DNA sequence encoding the mature form of mouse CXCL2 (P10889-1) (Ala 28-Asn 100) was fused with a N-terminal polyhistidine-tagged SUMO tag at the N-terminus.

Source: Mouse

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant mouse CXCL2 consisting of 189 amino acids and has a calculated molecular mass of 21.2 kDa. It migrates as a 30 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 0.1% TFA, pH 2.9

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

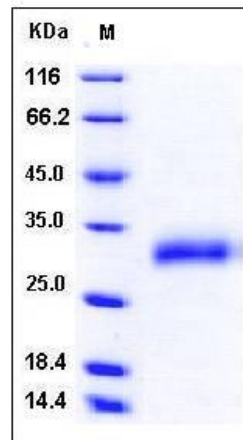
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

C-X-C motif chemokine 2, also known as growth-regulated protein beta, macrophage inflammatory protein 2-alpha, MIP2-alpha, CXCL2 and GRO2, is a secreted protein which belongs to the intercrine alpha (chemokine Cx) family. CXCL2 / MIP2-alpha is secreted by monocytes and macrophages and is chemotactic for polymorphonuclear leukocytes and hematopoietic stem cells. CXCL2 / MIP2-alpha has been known to regulate immune functions mainly by chemo-attracting neutrophils. It is produced by activated monocytes and neutrophils and expressed at sites of inflammation. CXCL2 / MIP2-alpha is Hematopoietic chemokine, which suppresses hematopoietic progenitor cell proliferation. CXCL2 / MIP2-alpha can be induced by receptor activator of NF-kappaB ligand, the osteoclast (OC) differentiation factor, through JNK and NF-kappaB signaling pathways in OC precursor cells. CXCL2 in turn enhanced the proliferation of OC precursor cells of bone marrow-derived macrophages (BMMs) through the activation of ERK. Knockdown of CXCL2 inhibited both the proliferation of and the ERK activation in BMMs. During osteoclastogenesis CXCL2 stimulated the adhesion and the migration of BMMs. CXCL2 is a novel therapeutic target for inflammatory bone destructive diseases.

References

1. Pelus LM, et al., 2006, Exp Hematol. Aug;34 (8): 1010-20.
2. De Plaen, I.G. et al., 2006, Immunology. 118 (2): 153-63.
3. Rubio, N. et al., 2006, Cell Immunol. 239 (1): 31-40.
4. Hohl, T.M. et al., 2008, J Infect Dis. 198 (2): 176-85.
5. Ha, J. et al., 2010, J Immunol. 184 (9): 4717-24.

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