Recombinant Cotton Rat CXCL2/GROβ/MIP-2/CINC-3

Catalog Number: 1084-M2/CF

DESCRIPTION

Source	*E. coli*-derived Ala29-Asn101 Accession # AAL26705
N-terminal Sequence Analysis	Ala29
Predicted Molecular Mass	8.0 kDa

SPECIFICATIONS

Activity	Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR2. The ED_{50} for this effect is 3-15 ng/mL.
Endotoxin Level	<0.01 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Macrophage inflammatory protein-2 (MIP-2) was originally identified as a heparin-binding protein secreted from a murine macrophage cell line in response to endotoxin stimulation. The protein is produced by a variety of cell types, including intestinal epithelium, macrophages, astrocytes and fibroblasts. Homologs of the mouse MIP-2 have been identified in human, rat and cotton rat. MIP-2 is an ELR-containing member of the alpha (CXC) subfamily of chemokines. The cotton rat MIP-2 gene encodes a 101 amino acid (aa) residue precursor protein with a 28 aa putative signal peptide that is cleaved to generate the 73 aa mature protein. Mature cotton rat MIP-2 has two intrachain disulfide bonds and no potential glycosylation sites. It shares approximately 79% and 85% aa sequence identity with rat CINC-3 and mouse MIP-2, respectively. MIP-2 is a potent neutrophil attractant and activator. MIP-2 binds and activates the chemokine receptor CXCR2. The recombinant cotton rat MIP-2 has been shown to bind and activate the human CXCR2 (1 - 5).

References:

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5. Feng, L. *et al.* (1995) J. Clin. Invest. **95**:1009.

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