Recombinant Rat CCL20/MIP-3α

Catalog Number: 540-RM

DESCRIPTION

Source	*E. coli*-derived Ala26-Met96 Accession # P97884.1
N-terminal Sequence Analysis	Ala26
Predicted Molecular Mass	8.2 kDa

SPECIFICATIONS

Activity	Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CCR6. The ED_{50} for this effect is 0.5-3 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>97%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 200 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.
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

CCL20, also known as MIP-3α, LARC (Liver and Activation-regulated Chemokine) and as Exodus, is one of many novel β chemokines identified through bioinformatics. Rat CCL20 cDNA encodes a 96 amino acid (aa) precursor protein with a 25 aa putative signal peptide that is predicted to be cleaved to form the 71 aa mature secreted protein. CCL20 is distantly related to other β chemokines (20 - 28% aa sequence identity). Rat MIP-3α shares approximately 70 and 61% aa sequence homology with mouse and human CCL20, respectively.

CCL20 has been shown to be expressed predominantly in lymph nodes, appendix, PBL, fetal liver, fetal lung, and epithelial cells of intestinal tissues. The expression of CCL20 is strongly up-regulated by inflammatory signals and down-regulated by the anti-inflammatory cytokine IL-10. Synthetic or recombinant CCL20 has been shown to be chemotactic for lymphocytes and dendritic cells, and inhibits proliferation of myeloid progenitors in colony formation assays. CCL20 has now been shown to be a unique functional ligand for CCR-6 (previously referred to as GPR-CY4, CKR-L3, or STRL22 orphan receptor), a chemokine receptor that is selectively and highly expressed in human dendritic cells derived from $CD34^+$ cord blood precursors.

References:

1. Baba, M. *et al.* (1997) J. Biol. Chem. **272**:14893.
2. Hromas, R. *et al.* (1997) Blood **89**:3315.
3. Greaves, D.R. *et al.* (1997) J. Exp. Med. **186**: 857.
4. Tanaka, Y. *et al.* (1999) Eur. J. Immunol. **29**:633.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449