

Recombinant Mouse CXCL15/Lungkine

Catalog Number: 442-LK

DESCRIPTION	
Source	E. coli-derived Gln26-Ala167, with an N-terminal Met Accession # Q9WVL7
N-terminal Sequence Analysis	Met
Predicted Molecular Mass	16.5 kDa
SPECIFICATIONS	
Activity	Bioassay data are not available.
Endotoxin Level	<0.01 EU per 1 µg of the protein by the LAL method.
Purity	>90%, 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 10 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

Mouse Lungkine/CXCL15 (1), also named WECHE (2), is a member of the ELR motif-containing CXC chemokines. The cDNA of mouse Lungkine encodes a protein of 166 amino acids (aa) with a 25 aa predicted signal peptide and a 141 aa mature protein with an extremely long C terminal tail that protrudes beyond the chemokine fold. Mouse Lungkine shares 35% aa sequence identity with human ENA-78 and 31% identity with human IL-8. The gene for mouse Lungkine has been mapped to chromosome 5. By Northern blot and in situ hybridization, Lungkine transcripts are only specifically detected in the adult and fetal lung, and its expression is upregulated under inflammatory conditions (1). Lungkine protein is secreted into bronchoalveolar space and is involved in lung-specific neutrophils trafficking (1). Studies from Lungkine knock out mice suggests that Lungkine is an important mediator of neutrophil migration from the lung parenchyma into the airspace (3). Lungkine is also chemotactic for bone marrow progenitor cells and modulates hematopoietic cell differentiation (2).

References:

- 1. Rossi, D.L. et al. (1999) J. Immunol. 162:5490.
- 2. Ohneda, O. et al. (2000) Immunity 12:141.
- 3. Chen, S-C. et al. (2001) J. Immunol. 166:3362.

