

Recombinant Murine Lungkine/CXCL15

#R00420

Size: 5 µg/100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Mouse Lungkine/CXCL15, also named WECHE, 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 up-regulated under inflammatory conditions. Lungkine protein is secreted into bronchoalveolar space and is involved in lung-specific neutrophils trafficking. Studies from Lungkine knock out mice suggests that Lungkine is an important mediator of neutrophil migration from the lung parenchyma into the airspace.

Lungkine is also chemotactic for bone marrow progenitor cells and modulates hematopoietic cell differentiation.

AA Sequence

QELRCLCIQEHSEFIPLKLIKIMVIFETIYCNRKEVIAV
PKNGSMICLDPDAPWVKATVGPITNRFLPEDLKQKEF
PPAMKLLYSVEHEKPLYLSFGRPENKRIFPFPIRETSR
HFADLAHNSDRNFLRDSSEVSLTGSDA

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Accession	Q9WVL7
GeneID	20309
Unigene	Mm.64326.
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 16.4 kDa, a single non-glycosylated polypeptide chain containing 142 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human neutrophils is in a concentration of 20-100 ng/ml.
Physical	Sterile Filtered White Lyophilized

Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4, with 0.02 % Tween-20.
Endotoxin	Less than 1 EU/μg of rMuLungkine/CXCL15 as determined by LAL method.