

32-6609: Lungkine Mouse

Application : Functional Assay

Alternative Name : C-X-C motif chemokine 15, Lungkine, Small-inducible cytokine B15, Cxcl15, Scyb15.

Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

Mouse Lungkine/CXCL15 (WECH) belongs to the ELR motif-containing CXC chemokines. The mouse Lungkine gene has been mapped to chromosome 5. The cDNA of mouse Lungkine encodes a 166 amino acids (aa) protein with a 25 aa predicted signal peptide and a 141 aa mature protein with an exceptionally long C-terminal tail which extends beyond the chemokine fold. Lungkine protein is secreted into bronchoalveolar space and is involved in lung-specific neutrophils trafficking. Furthermore, studies in Lungkine knockout mice propose that Lungkine is an imperative mediator of neutrophil migration from the lung parenchyma into the airspace. In addition, Lungkine is chemotactic for bone marrow progenitor cells and modulates hematopoietic cell differentiation. By Northern blot analysis and in-situ hybridization, Lungkine transcripts have only been specifically detected in the adult and fetal lung, and its expression is up-regulated under inflammatory conditions. There is a 35% aa sequence similarity between the mouse Lungkine and the human ENA-78 and a 31% similarity with the human IL-8. Recombinant Mouse Lungkine produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 142 amino acids and having a molecular mass of 16.4kDa. The CXCL15 is purified by proprietary chromatographic techniques.

Product Info

Amount : 5 µg / 20 µg

Purification : Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

The Lungkine protein was lyophilized from a 0.2µm filtered concentrated solution in PBS pH 7.4 and 0.02% Tween-20.

Content : It is recommended to reconstitute the lyophilized Lungkine in sterile 18M-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage condition : Lyophilized Lungkine although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL15 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Amino Acid : QELRCLCIQE HSEFIPLKLI KNIMVIFETI YCNRKEVIIV PKNQSMICLD PDAPWVKATV
GPITNRFLE DLKQKEFPPA MKLLYSVEHE KPLYLSFGRP ENKRIFPFPI RETSRHFADL
AHNSDRNFLR DSSEVSLTGS DA.

Application Note

The biological activity determined by a chemotaxis bioassay using human neutrophils is in a concentration of 20-100 ng/ml.