

Product Description

The most abundant cell type in the lung interstitium is the fibroblast. These fibroblasts resemble ordinary fibroblasts, but also possess some distinguishing features such as long, branching processes and gap junctions. Pulmonary fibroblasts function to produce type III collagen, elastin, and proteoglycans of the extracellular matrix of the alveolar septa. They play an important role in the repair and remodeling processes following tissue damage. The controlled accumulation of fibroblasts to sites of inflammation is crucial to effective tissue repair after injury [1]. An inadequate or an excessive accumulation of fibroblasts can result in abnormal tissue function. For example, excess proliferation of fibroblasts contributes to adventitial thickening observed during the development of hypoxia-induced pulmonary hypertension [2].

iXCells Biotechnologies provides high quality Rat Pulmonary Fibroblasts (RPF), which are isolated from postnatal day 2 rat lung, and cryopreserved at P0, with >0.5 million cells in each vial. RPF are characterized by fibroblast morphology and they are negative for mycoplasma, bacteria, yeast, and fungi. RPF can further expand for 5 population doublings in Fibroblast Growth Medium (Cat# MD-0011) under the condition suggested by iXCells Biotechnologies.

Product Details

Tissue	Postnatal day 2 rat lung
Package Size	0.5 million cells/vial
Passage Number	P0
Shipped	Cryopreserved
Storage	Liquid nitrogen
Growth Properties	Adherent
Media	Fibroblast Growth Medium (Cat# MD-0011)

References

[1] Kuwano K, Hagimoto N, Hara N. (2001) Molecular mechanisms of pulmonary fibrosis and current treatment. *Curr Mol Med* 1(5):551-73.

[2] Das M, Dempsey EC, Reeves JT, Stenmark KR. (2002) Selective expansion of fibroblast subpopulations from pulmonary artery adventitia in response to hypoxia. *Am J Physiol Lung Cell Mol Physiol* 282(5):L976-86. ScienCellResearch Laboratories™

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura,
Delhi – 110034 (INDIA).

Mobile: +91-9810521400, Ph: +91-11-42208000

Email: customerservice@lifetechindia.com

Web: www.lifetechindia.com