

## Product Description

Fibroblasts are mesenchymal cells derived from the embryonic mesoderm. They have been extensively used for a wide range of cellular and molecular studies as they are one of the easiest types of cells to grow in culture. Their durability also makes them amenable to a variety of manipulations ranging from studies employing gene transfection to microinjection. There is evidence showing that fibroblasts in various organs are intrinsically different [1]. Specifically, human pulmonary artery adventitial fibroblasts (HPAAF) are important modulators of vascular wall function [2]. During pathological conditions, such as hypoxia-induced pulmonary hypertension, HPAAF become proliferative which contributes to adventitial thickening [3].

iXCells Biotechnologies provides high quality HPAAF, which are isolated from human pulmonary artery and cryopreserved at P1, with >0.5 million cells in each vial. HPAAF express fibronectin and are characterized by their spindle-shaped morphology. They are negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi and can further expand for 16 population doublings in Fibroblast Growth Medium (Cat# MD-0011) under the condition suggested by iXCells Biotechnologies.

## Product Details

<b>Tissue</b>	Human pulmonary artery
<b>Package Size</b>	0.5 million cells/vial
<b>Passage Number</b>	P1
<b>Shipped</b>	Cryopreserved
<b>Storage</b>	Liquid nitrogen
<b>Growth Properties</b>	Adherent
<b>Media</b>	Fibroblast Growth Medium (Cat# MD-0011)

## References

- [1] Conrad, G. W., Hart, G. W., Chen, Y. (1977) Differences in vitro between fibroblast-like cells from cornea, heart, and skin of embryonic chicks. *J. Cell Sci.* 26:119-137.
- [2] Pendurthi, U. R., Rao, L. V. M., Williams, J. T. and Idell, S. (1999) Regulation of tissue factor pathway inhibitor expression in smooth muscle cells. *Blood* 94:579-586.
- [3] 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.

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