



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 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. In general, fibroblasts secrete a non-rigid extracellular matrix which is rich in type I and/or type III collagen [1]. There is evidence showing that fibroblasts in different organs are intrinsically different [2]. Dermal fibroblasts switch from a proliferative, migratory phase to a contractile, matrix-remodeling phase during wound healing. In addition, they secrete large quantities of hyaluronan in response to inflammatory stimuli [3].

iXCells Biotechnologies provides high quality Rat Dermal Fibroblasts-Neonatal (RDF-n), which are isolated from neonatal rat skin and cryopreserved at P1, with >0.5 million cells in each vial. RDF-n express fibronectin and are negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi. They can further expand for 5 population doublings in Fibroblast Growth Medium (Cat# MD-0011) under the condition suggested by iXCells Biotechnologies.

Product Details

Tissue	Neonatal rat skin
Package Size	0.5 million cells/vial
Passage Number	P1
Shipped	Cryopreserved
Storage	Liquid nitrogen
Growth Properties	Adherent
Media	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] Gabbiani, G., Rungger-Brandle, E., The fibroblast. In Tissue Repair and Regeneration (L. E. Glynn, ed.), pp 1-50. Handbook of Inflammation, Vol. 3. Amsterdam, Elsevier, 1981.

[3] Stair S, Carlson KW, Shuster S, Wei ET, Stern R (2002) Mystixin peptides reduce hyaluronan deposition and edema formation. Eur J Pharmacol 30;450(3):291-6.

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