

## Product Description

Perineurial fibroblasts are of mesenchymal origin and form the perineurium. The perineurium plays an important role in maintaining the integrity of the internal peripheral nerve environment by creating a physical barrier that, under physiologic condition, limits the entry of biologically active proteins, infectious agents, and blood-borne cells into the nerve bundles [1]. The perineurial fibroblasts are characterized by distinct ultrastructural features, including non-branching thin cytoplasmic processes coated by an external lamina and joined at their ends by a tight junction, few organelles, actin and vimentin filaments, and numerous pinocytotic vesicles [2]. Perineurial fibroblasts are initially recruited from the surrounding mesenchyme to form a loose, permeable sheath around axons and Schwann cells, where they are separated by the extracellular matrix. These cells later undergo a mesenchymal-to-epithelial transition to form tight junctions and organize into the perineurium. Perineurial fibroblasts are immunoreactive for vimentin and epithelial membrane antigen but not for the Schwann cell marker S-100 [3].

iXCells Biotechnologies provides high quality Rat Perineurial Fibroblasts (RPNF), which are isolated from postnatal day 8 rat sciatic nerve and cryopreserved at P1, with >0.5 million cells in each vial. RPNF express vimentin, S-100, GFAP and CD90. They are negative for mycoplasma, bacteria, yeast, and fungi and 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 8 rat sciatic nerve
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] Salzer, J. L. (1999) Creating barriers: a new role for Schwann cells and desert hedgehog. *Neuron* 22:627-629.  
 [2] Erlandson, R. A. (1991) The enigmatic perineurial cell and its participation in tumors and in tumor like entities. *Ultrastruct Pathol.* 15:335-351.  
 [3] Ariza, A., Bilbao, J. M. and Rosai, J. (1988) Immunohistochemical detection of epithelial membrane antigen in normal and perineurial cells and perineurioma. *Am J Surg Pathol.* 12:678-683.

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](mailto:customerservice@lifetechindia.com)

Web: [www.lifetechindia.com](http://www.lifetechindia.com)