

**Technology for Routine Three Dimensional (3D) Cell Culture**

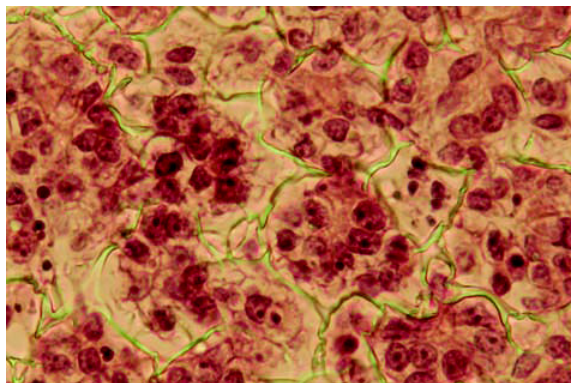
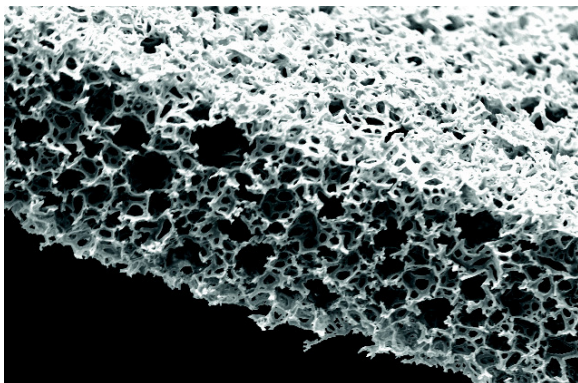
**What is 3D cell culture?**

3D cell culture is about creating suitable surroundings for optimal cell growth, differentiation and function by:

- Allowing individual cells to maintain their normal 3D shape and structure with minimal exogenous support and interference,
- Encouraging cells to form complex interactions with adjacent cells and receive and transmit signals,
- Enabling a more natural environment to foster the creation of native architecture found in tissue structures,
- Reducing stress and artificial responses as a result of cell adaptation to flat, 2D growth surfaces.

**What is alvetex®?**

Alvetex® is a highly porous, cross-linked polystyrene scaffold, which has been sectioned into 200 µm thick membranes (below left). The resulting material is inert and does not degrade during normal use. It has been adapted to fit a variety of conventional cell culture plasticware formats. Alvetex® provides a suitable 3D structure in which cells can proliferate, migrate, differentiate and function in an appropriate niche environment. Cells maintain a 3D shape and form close interactions with adjacent cells (below right, TERA2.cl.SP12 cells maintained for 12 days).



The product has been terminally sterilised by gamma irradiation and remains sterile until opened. Alvetex® requires an ethanol (EtOH) wash prior to use to render it hydrophilic. The material is compatible with a broad range of standard molecular, cellular and histological techniques.

AMSBIO is the global source for alvetex®.  
alvetex® is a registered trade mark of and manufactured by Reinnervate.