

細胞培養的利器

Millicell[®] Inserts



- 圓柱型加高設計，邊緣無開口，內外培養液不易相混，避免造成實驗誤差。
- 單顆無菌包裝，自由調整使用量，節省成本。
- 以 Membranes 為底的設計，讓細胞的生長環境更接近自然。
- 三端不對稱懸掛式設計，方便更換培養液及藥物的添加。
- 根據不同應用可選擇不同的孔徑大小。
- 另有站立式 Millicell，提供 PCF、MCE、PTFE 材質任君選擇。
- 24 well 及 96 well 盤式 Millicell，方便大量培養使用。
- 依照您不同的應用，給您不一樣的孔徑選擇。



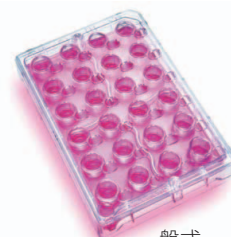
站立式



懸掛式



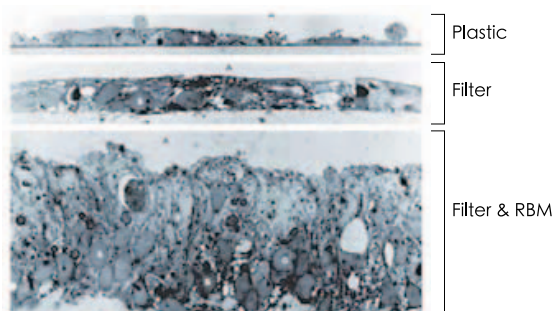
Organotypic 專用



盤式

使用 Millicell 培養細胞，更貼近 *in vivo* 的狀況

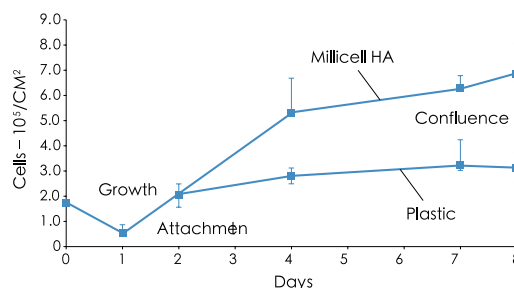
Improved Cell Morphology



Cells grow better on a membrane than on plastic because they're nourished from both the apical and basolateral sides.

提供 MDCK 有較好的生長環境

Improved Attachment, Growth and Confluence



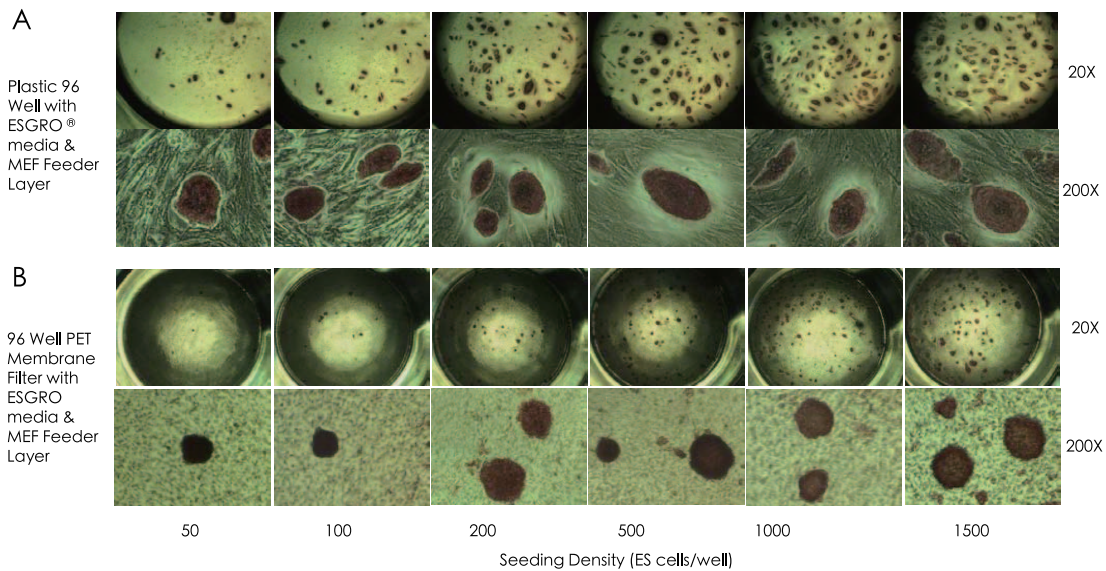
比較 MDCK (Madin Darby Canine Kidney) 細胞培養在一般的塑膠培養皿和 Millicell (HA insert) 裡的結果。結果發現培養在 Millicell 裡的 MDCK 細胞，生長的情形優於一般培養於塑膠培養皿。

Special for ES cell

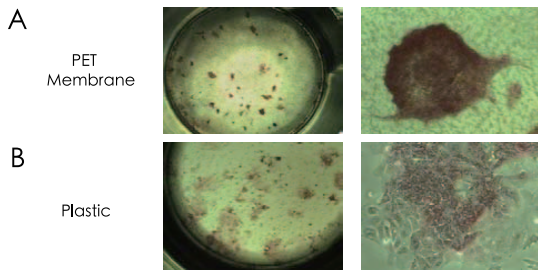


- 維持 ESC 有較好的 pluripotent characteristics。
- 細胞 morphology 更優於 plastic。
- ESC (Embryonic stem cell) 不需要和 MEF 直接接觸，因此不會受過度生長的 MEF 影響，也可以使實驗較易分離 ESC 及 MEF，得到純度較高的 ESC。
- MEF (mouse embryonic fibroblasts) 不需經過 mitotic C 處理，節省成本。
- 比傳統方法操作簡單。

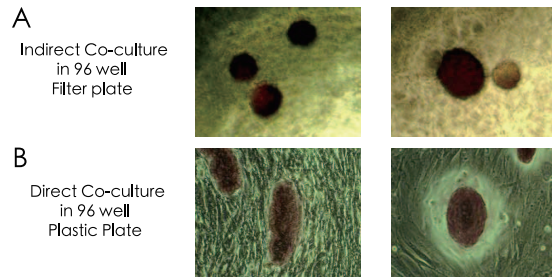
Clonal Selection of Embryonic Stem Cell Colonies by Serial Dilution



Influence of Substrate on ES cell colony Morphology



Indirect Co-culture on Filter Eliminates Need to Inactivate MEFs



依照您不同的應用，給您不一樣的選擇

Application	Standing Insert (pore size)	Hanging Insert (pore size)	24-well Plate (pore size)	96-well Plate (pore size)
Angiogenesis	PCF (3, 8)	PET (3, 5, 8)	PCF (3, 5, 8)	MultiScreen MIC Plate
Cell Proliferation	PCF (0.4)	PET (1)	PCF (0.4)	PCF (0.4) PET (1)
Cell Surface Receptors	PCF (0.4) HA (0.45) CM (0.4)	PET (1)	PCF (0.4) PET (1)	PCF (0.4) PET (1)
Chemotaxis	PCF (3, 8)	PET (3, 5, 8)	PCF (3, 5, 8)	MultiScreen MIC Plate
Co-culture	"PCF (0.4) CM (1)	PET (1, 3)	PET (1) PCF (0.4)	PET (1) PCF (0.4)
Migration/Invasion	PCF (8)	PET (5, 8)	PCF (5, 8)	MultiScreen MIC Plate
Epithelial Cell Growth	PCF (0.4)	PET (0.4, 1)	"PCF (0.4)	PCF (0.4) PET (1)
Feeder Layers	PCF (0.4, 3, 8)	PET (0.4, 1, 3, 5, 8)	"PCF (all) PET (1)	PCF (0.4)
Fluorescent Detection/ Immunohistochemistry	"PCF (all) CM (0.4)	PET (1)	PET (all) PET (1)	PET (all) PET (1)
In Vitro Fertilization	CM (0.4)	PET (1)	PET (1)	PET (1)
<i>In Vitro</i> Toxicology	"PCF (0.4) CM (0.4) HA (0.45)	PET (0.4, 1) PET (1)	PET (0.4) PET (1)	PCF (0.4) PET (1)
Microbial Attachment	PCF (0.4) CM (0.4) HA (0.45)	PET (0.4, 1)	PCF (0.4) PET (1)	PCF (0.4) PET (1)
Organotypic	Organotypic (0.4)			
Phase Contrast Microscopy	CM (0.4)	PET (1)	PET (1)	PET (1)
Polarized Protein Secretions	PCF (0.4) CM (1)	PET (0.4, 1)	PCF (0.4) PET (1)	PCF (0.4) PET (1)
Polarized Uptake	PCF (0.4) CM (0.4) HA (0.45)	PET (0.4, 1)	PCF (0.4) PET (1)	PCF (0.4) PET (1)
Transport/Permeability	PCF (0.4)	PET (1)	PCF (0.4) PET (1)	PCF (0.4) PET (1)
Tumor Cell Metastasis and Invasion	PCF (8)	PET (5, 8)	PCF (5, 8)	MultiScreen MIC Plate