以切向流超過濾濃縮日本腦炎病毒之研究 = The concentration of Japanese encephalitis virus by cross-flow ultrafiltration

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摘 要

日本腦炎為季節性的疾病，不僅日本，其他亞洲國家也有發生這種疾病。每年大約有50,000的病人，並且擴大中；會致死的比例佔有30%，大於50%是會產生神經性方面的後遺症。Vero cell line在1962年已確定由非洲成年的綠猴腎臟細胞（vero cell）取得，日本腦炎病毒則是來自日本的北京株，目前這些細胞株使用在狂犬病及小兒麻痺疫苗，且確定具有安全性。本實驗主要是以vero cell培養北京株Beijine strain之日本腦炎病毒Japanese encephalitis virus (JEV)，以T-Flask培養到塑膠細胞培養圓瓶Roller bottle，待細胞長滿到所需的細胞密度之後，接種病毒培養72小時，將病毒收集後開始測試堆膜卡匣最適化之條件，分別以50cm2和0.02m2兩個不同面積的100 K Da（Dalton；簡稱100K）堆膜卡匣，和兩個不同的壓力4.2.0 psi及壓力6.0.0 psi，實際堆膜卡匣的壓力Trans Membrane Pressure（TMP）為3 psi的條件下，比較兩者之間的差異。 研究結果，壓力4.2.0 psi (TMP 3 psi)和壓力6.0.0 psi (TMP 3 psi) 兩者之間的探討，以壓力4.2.0 psi (TMP 3 psi) 雖然流速較不穩定，但回收率較高。

關鍵詞 : 非洲綠猴腎臟細胞 ; 100K 濃縮卡匣 ; 日本腦炎病毒

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