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• 英文關鍵字	Chinese herb；Tumor cell；Folk medicine；Differentiation inducer；Rat；Leukemia；Glioma
• 中文摘要	癌細胞之增殖阻礙和分化表現,被認爲有著極爲密切的關連性。因此癌細胞分化誘之研究,可說是深具理論意義之課題,且亦期能開發應用於臨床癌細胞的治療。 本實驗欲以建立之各癌細胞分化誘導活性之檢測模式:(1)大白鼠神經膠瘤細胞 C6 株; (2)人類前骨髓性白血病細胞 HL60 株;(3)人類慢性骨髓性白血病細胞 K562 株,來探索中草藥中具有誘導細胞分化活性之抗癌物質爲目的。主要之研究方法與觀察指標爲:(1)細胞生長形態變化,(2)MTT 反應呈色度,(3)麩氨合成酵素活性,(4)CNP 酵素活性,(5)HL60 細胞 NBT 還原能和吞食能,(6)K652 細胞 Benzidine 染色法等。 在神經膠瘤 C6 細胞的檢測系統上,藉觀察其細胞生長,形態變化及 MTT 反應呈色度,來檢測五靈脂之水層,甲醇-水分層,甲醇-醋酸乙酯分層之生物活性反應。結果得知以甲醇-醋酸乙酯分層萃取物對 C6 細胞的分化誘導活性最爲明顯。再以矽膠管柱層析純化及篩選醋酸乙酯分層,其中又以第 3,4,10,11 分層之生物活性爲佳。將具有高分化誘導活性之各個分層萃取物,繼續進行再純化和篩選工作。結果得到幾個更加純化且仍具有生物活性的分層物質。針對這些具有分化誘導活性之分層成分,正加緊再純化和進行各種篩選工作之檢討。以期能獲得具有分化誘導活性之最終純化物質。
• 英文摘要	It is known that the relationship between growth inhibition and differentiation expression is very close. The studies on the differentiation induction of carcinoma is not only a good proposal for anticancer research, but also a novel approach for clinic cancer therapy. In order to survey the active differentiation inducer containing in Chinese folk medicine, we try to modify and improve the established assay models of tumor cells line, especially for rat glioma C6 cells. The observation indexes of bioassay activity are including: (1) Cells morphologic changes; (2) MTT colorimetric reaction; (3) Glutamine synthetase activity; (4) and/or 2',3'-Cyclic neucleotide-3'-phosphodiesterase activity; (5) NBT reduction and phagocytosis of

HL-60 cells; (6) The benzidine stain for K562 cells, etc. By detecting morphologic changes and MTT assay in glioma C6 cells, we found that the extracts obtained from methanol-ethylacetate layer of Trogopterus xanthipes Milne-Edwards has more potent activities than water or methanol-water layers. Further isolation and purification of the active constitutes is progressing by silica gel colum method. It is also found that the 3, 4, 10, 11, etc. subfractions persisting the induction activities for cells differentiation. In order to isolate the active pure components contained in Tr. xa. finally, now we are purifying each one of the concerned active subfractions.