

克弗爾發酵乳粉之基因毒性分析

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摘要

克弗爾(kefir)是一種由克弗爾粒(kefir grain)經發酵作用產生的發酵乳，其具有抗菌、抗真菌、抗病毒、抗過敏、抗發炎及調降血壓等的生物活性。本實驗針對克弗爾發酵乳粉進行潛在的基因毒性分析。首先，由體外細菌篩檢平台(Ames test)初步檢測後，再以三種體外哺乳類動物細胞平台進行重複確認，包括小鼠淋巴瘤tk分析(mouse lymphoma tk assay, MLA)、染色體變異試驗(chromosome aberrations assay, CA)及細胞質分裂阻斷之微核試驗(cytokinesis-block micronucleus assay, CBMN)，最後再以小鼠週邊血液微核試驗(mice peripheral blood micronucleus assay)檢測克弗爾發酵乳粉於活體內之基因毒性。以上五種基因毒性分析方法均參考國際標準法規(OECD Guidelines for the Testing of Chemicals)之建議進行試驗。結果顯示，各試驗利用不同的陽性致突變劑(直接性及間接性誘發基因毒性之試劑)證實，五種基因毒性檢測平台均可檢測出致突變劑所誘導之基因毒性，而本樣品克弗爾發酵乳粉在這五種獨立的檢測下並無基因毒性。

關鍵詞：克弗爾、基因毒性、安姆試驗、小鼠淋巴瘤tk分析、染色體變異試驗、細胞質分裂阻斷之微核測試、體內微核試驗

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