牛初乳水解物之普拉斯丁產物在體外之免疫調節及細胞活性

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摘 要

本研究用母牛分娩後第2天分泌之初乳，經Flavourzyme水解後，所得之初乳水解物，在pH 5和9條件下，加入proline以Flavourzyme進行普拉斯丁反應4、8及12小時後之普拉斯丁產物，與人類單核球細胞培養1及3天後之條件培養液(MNC-CM)，再進行U937細胞生長之抑制及免疫調節之活性試驗。結果顯示，在pH 9反應8小時之普拉斯丁產物(Pp-9-8)，在濃度800 μg/mL下，其對U937細胞生長之抑制效果及細胞激素之分泌量皆具有顯著之效果。另外以3種胺基酸(Tyrosine, Leucine, Glycine)在pH 9和反應8小時之條件下進行普拉斯丁反應，所得之產物(Tp-9-8, Lp-9-8, Gp-9-8)與Pp-9-8進行相同試驗之比較。結果顯示，Pp-9-8與Lp-9-8對U937細胞生長之抑制皆具有顯著之效果，且可顯著刺激細胞激素之分泌。本研究亦對Pp-9-8及Lp-9-8進行模擬腸胃道消化試驗，探討經由腸胃道酵素作用後，對U937細胞生長之抑制及免疫調節之功效。結果顯示，經模擬腸胃道之普拉斯丁產物，對U937細胞生長之抑制及細胞激素之分泌量均有降低之趨勢。

關鍵詞 : 牛初乳、普拉斯丁、白血病細胞株U937、細胞激素

目錄

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