

記錄 編號	6315
狀態	NC094FJU00105010
助教 查核	
索書 號	
學校 名稱	輔仁大學
系所 名稱	生命科學系
舊系 所名 稱	
學號	493546118
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論文 名稱 (中)	探討牛蒡子苷元抑制血小板凝集之作用機制
論文 名稱 (英)	The Study of Inhibitory Mechanisms of Arctigenin on Platelet Aggregation
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校內 全文 開放 日期	
校外 全文	

開放日期	
全文不開放理由	
電子全文送交國圖.	
國圖全文開放日期.	
檔案說明	
電子全文	
學位類別	碩士
畢業學年度	94
出版年	
語文別	中文
關鍵字(中)	牛蒡子昔元
關鍵字(英)	Arctigenin
摘要(中)	<p>血小板在體內恆定以及凝血機制上面扮演著重要的角色。然而，過度活化的血小板在各種不同的病理上也是主要的成因。PAF 與 TXA₂ 能透過活化不同的 G 蛋白偶合受體誘發血小板活化凝集。而存在於牛蒡子 (Bardanae fructus)、水母雪蓮 (Saussurea medusa)、牛蒡 (Arctium lappa L.)、日本榧樹 (Torreya nucifera) 與槭葉牽牛 (Ipomea cairica) 這些植物中的牛蒡子?元，屬於 dibenzylbutyrolactone lignans 的一員，這類物質本身兼具有抗氧化及抗發炎的功效。根據文獻報導，牛蒡子?元為 PAF 受體的拮抗劑 (antagonist)。本實驗首次以血小板為材料，發現 arctigenin 能有效抑制 PAF 所媒介的紐西蘭大白兔血小板凝集及細胞內鈣離子移動。</p>

	<p>此外 arctigenin 亦可抑制 AA 與 U46619 對血小板引發的凝集，其對 AA 之抑制作用，可能是透過部份影響 AA 的代謝；另一方面，arctigenin 可分別抑制鈣離子的移動與 PMA 活化之血小板凝集，故推測可能經由協同作用，而降低 U46619 所誘發的血小板凝集。</p>
<p>摘要 (英)</p>	<p>Platelets play essential roles in the hemostasis and thrombosis. However, overactivation of platelet would become an important factor in a wide range of pathological conditions. Platelet-activating factor (PAF) and thromboxane A2 (TXA2) activate multiple G protein-mediated signaling pathways and result in platelet aggregation. Arctigenin, naturally existing in Bardanae fructus, Saussurea medusa, Arctium lappa, Torreya nucifera, and Ipomea cairica, is a phenylpropanoid dibenzylbutyrolactone lignan with antioxidant and anti-inflammatory activities. Previous study reported arctigenin was a PAF antagonist. The present study demonstrated for the first time that pretreatment of arctigenin could inhibit PAF-mediated rabbit platelet aggregation and calcium mobilization. Moreover, arctigenin could suppress platelet aggregation stimulated by AA and U46619. The inhibition of AA-induced platelet aggregation by arctigenin might be partially correlated with AA metabolism. On the other hand, arctigenin synergistically reduced platelet activity might result from the decrease of calcium mobilization and PMA-evoked platelet aggregation.</p>
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論文 頁數	73
附註	
全文 點閱 次數	
資料 建置 時間	
轉檔 日期	
全文 檔存 取記 錄	
異動 記錄	M admin Y2008.M7.D3 23:18 61.59.161.35