

# Desmocollin-2 ( DSC2 ) 基因抑制人類肺癌細胞的增生與移動能力 = Desmocollin-2 ( DSC2 ) Inhibit proliferation and migration ability

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## 摘要

肺癌是目前全球癌症死亡率最高的疾病之一，肺癌病患死亡主要原因是癌細胞發生轉移。癌細胞轉移的過程中會有許多複雜的機制參與其中，當然也牽涉到許多不同功能的基因。本研究的主要目的是要篩選並建立出與肺癌轉移相關的基因，並進一步探討癌細胞轉移的分子作用機制。在本研究中使用微陣列技術以及肺癌轉移模式細胞株，篩選出與癌轉移相關的基因。本研究針對所篩選出可能的癌轉移相關基因Desmocollin-2進行深入的探討。在本研究結果顯示在高度轉移能力的肺癌細胞株中如A549與CL1-5其Desmocollin-2基因的表現量相對較少於低轉移能力的CL1-0肺癌細胞株，這個結果說明Desmocollin-2基因的表現與肺癌細胞的轉移及侵入能力呈現負相關。利用shRNA-DSC的表現載體抑制Desmocollin-2基因表現後，我們發現抑制Desmocollin-2基因的表現會促進肺癌細胞的生長以及移動能力，同時也促進了肺癌細胞的群落形成能力。最後發現在穩定抑制Desmocollin-2基因的細胞株其生長形態出現Epithelial to mesenchymal transition (EMT)的現象，這些實驗的結果都證明了Desmocollin-2基因在肺癌細胞中扮演抑制轉移的角色。

關鍵詞：肺癌、轉移

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