結合甲基化敏感性分析和抑制性扣減雜交區分出在大腦和下視丘之間具有甲基化差異性表現的片段

張文彥、李泰林

E-mail: 9417461@mail.dyu.edu.tw

摘 要

中文摘要 印記基因現象依對偶基因的親源而產生不同的epigenetic標記，藉由這些標記而區分出來自父方或是母方的對偶基因，已知可能和DNA甲基化影響核染色質結構或是和某種蛋白質與核酸之間的結合有關。在目前已知的印記基因中Igf2、Snrpn是在父源基因組上被表現，而H19、Igf2r、Mash2是在母源基因組上被表現，同時在經過追蹤嵌合鼠上細胞的表現位置後，發現父源染色體在下視丘上有專一性表現，而母源染色體在大腦上有專一性表現。有鑒於在大腦上看到此差異性的表現，我們結合了甲基化敏感性分析和抑制性扣減雜交suppression subtractive hybridization (SSH)方法來有效的找尋大腦和下視丘之間具有甲基化差異性表現的基因。目前在下視丘上找到一段有甲基化差異表現的片段落在一段基因swim6之第二個內含子(intron)上，在基因庫中顯示小鼠存在兩種mRNA序列，共用exon3之後所有exon，分別為6.6 (XM_358311) 及4.2 Kb (AK122528)。再進一步去確認較長的Zswim6 mRNA，發現在肝臟中表現量最多，而mKIAA1577 mRNA在8種檢測組織中mRNA的表現量相當。組織間在第二個內含子亦呈現DNA甲基化程度上顯現差異，而且以肝臟組織為最多，此現象可能與外顯子的選擇有關。 關鍵詞：印記基因，DNA甲基化，甲基化敏感性限制?，抑制性扣減雜交

關鍵詞 : 甲基化

目錄

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