草蝦細胞表面受體與白點症病毒結構性蛋白質交互作用分析 = Interactions between penaeus monodon cell surface receptors and w

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摘 要

白點症病毒(white spot syndrome virus, WSSV 隸屬於Nimaviridae, Whispovirus)是一能感染養殖蝦類與多數甲殼類生物的廣域流行性病毒，引發嚴重死亡並造成全球養殖蝦產業嚴重的經濟損失，截至目前為止並無任何有效的方法可治療此病毒所引起的疾病。近年來許多宿主細胞與WSSV交互作用的相關研究陸續被報導。本研究中，經選殖獲得草蝦受體蛋白質pmgC1qR (Penaeus. monodon C1q receptor)全長基因，並與其它兩種已知草蝦受體蛋白質pmRab7 (P. monodon Rab7 protein)、Lamr (laminin receptor)藉由酵母菌雙雜交基因庫全面性分析其交互作用之 WSSV 結構性蛋白質，結果顯示pmgC1qR、pmRab7和 Lamr 分別能與19、24 以及 42 個病毒結構性蛋白質進行交互作用，經共免疫沉澱分析進一步確認了 pmgC1qR 與VP52A、VP19及VP26， pmRab7 與VP52B、VP56，Lamr 與VP31、VP264C及VP26間之交互作用。上述結果期能提供病毒與草蝦細胞受體間交互作用機制之釐清與後續開發抗病毒策略之依據。 關鍵詞：白點症病毒、受體蛋白質、草蝦、病毒宿主間交互作用、蛋白質蛋白質交互作用。

關鍵詞 : 白點症病毒、受體蛋白質、病毒宿主間交互作用、蛋白質蛋白質交互作用、草蝦

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