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**乙酰肝素酶对卵巢癌细胞侵袭和黏附的影响** [点此下载全文](#)

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**摘要:**

目的: 探讨乙酰肝素酶 (heparanase, HPSE) 在卵巢癌A2780细胞侵袭、转移中的作用。方法: 构建携HPSE基因真核表达载体pcDNA3.1-HPSE, 脂质体法将pcDNA3.1-HPSE和对照pcDNA3.1质粒转染至A2780细胞, G418筛选得稳定细胞株pcDNA3.1-HPSE-A2780和pcDNA3.1-A2780。MTT法和集落形成实验检测转染后A2780细胞的增殖; Matrigel侵袭、Transwell 小室和黏附实验检测转染后A2780细胞的侵袭、迁移和黏附能力。结果: 成功构建pcDNA3.1-HPSE载体, 并转染入A2780细胞。pcDNA3.1-HPSE转染不影响A2780细胞的增殖 ( $P > 0.05$ ), 也不影响A2780细胞的迁移能力 ( $P > 0.05$ )。pcDNA3.1-HPSE转染促进A2780细胞的侵袭 ( $0.477 \pm 0.024$  vs  $0.250 \pm 0.081$ ,  $P = 0.003$ ), 降低其黏附能力 ( $0.728 \pm 0.089$  vs  $0.518 \pm 0.080$ ,  $P = 0.002$ )。结论: HPSE通过促进肿瘤细胞的侵袭和降低黏附, 在卵巢上皮癌浸润、转移中发挥重要作用

**关键词:** [乙酰肝素酶](#) [卵巢癌](#) [侵袭](#) [迁移](#) [黏附](#)

Heparanase promotes invasion and adhesion of ovarian carcinoma cells [Download Fulltext](#)

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Abstract:

Objective: To explore the roles of heparanase (HPSE) in the invasion and metastasis of human ovarian carcinoma A2780 cells. Methods: pcDNA3.1-HPSE eukaryotic expression vector was constructed. pcDNA3.1-HPSE and empty pcDNA3.1 plasmids were transfected into A2780 cells by Lipofectamine method, and A2780 cells stably expressing pcDNA3.1-HPSE or pcDNA3.1 were selected by G418 (named pcDNA3.1-HPSE-A2780 or pcDNA3.1-A2780 cells). The proliferation of A2780 cells after pcDNA3.1-HPSE transfection was detected by MTT and clone-forming experiment, and the invasion, migration and adhesion capacities of A2780 cells were tested by Matrigel, Transwell and Adhesion assays, respectively. Results: The pcDNA3.1-HPSE vector was successfully constructed and transfected into A2780 cells. pcDNA3.1-HPSE transfection had no effect on proliferation and migration of A2780 cells (all  $P > 0.05$ ). pcDNA3.1-HPSE transfection increased invasion ( $0.477 \pm 0.024$  vs  $0.250 \pm 0.081$ ,  $P = 0.003$ ) and inhibited the adhesion of A2780 cells ( $0.728 \pm 0.089$  vs  $0.518 \pm 0.080$ ,  $P = 0.002$ ). Conclusion: Heparanase plays important roles in ovarian carcinoma by promoting invasion and inhibiting adhesion of tumor cells.

Keywords: [heparanase](#) [ovarian carcinoma](#) [invasion](#) [migration](#) [adhesion](#)

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