

论著

两种SYK蛋白异构体在乳腺癌中的表达及其对细胞侵袭力的影响

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摘要 目的: 探讨2种SYK蛋白异构体在乳腺癌中的表达和各自对乳腺癌细胞侵袭力的影响。方法: 采用Western blotting方法检测乳腺癌细胞MB435、ZR75.1、MB46、T47D和MCF 7中SYK的表达; 采用SYK(-)的乳腺癌细胞系MB435构建表达SYK(L)或者SYK(S)的稳定细胞株, 采用体外细胞侵袭力试验检测SYK(L)和SYK(S)对细胞侵袭力的影响。结果: SYK(L)和SYK(S)在大部分乳腺癌细胞系中同时表达; 采用Fugene 6转染和G418筛选方法成功构建SYK(L)或SYK(S)稳定细胞株; SYK(L)在乳腺癌细胞中表达可以抑制细胞的侵袭力, SYK(S)对细胞的侵袭力没有影响。结论: 2种SYK蛋白异构体在乳腺癌细胞系中普遍同时表达; 只有SYK(L)可以抑制乳腺癌细胞的侵袭性。

关键词 [蛋白质酪氨酸激酶](#); [乳腺肿瘤](#); [肿瘤浸润](#)

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Expression of 2 SYK protein isoforms in breast cancer cells and their effect on cell invasion

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Abstract

AIM: This study was to explore the expression of spleen tyrosine kinase(SYK)(L) and SYK(S) in breast cancer cells and their effects on invasive phenotype of breast cancer cell line MB435. **METHODS:** The expression of SYK in breast cancer cell lines MB435, ZR75.1, MB468, T47D and MCF 7 were detected by Western blotting. MB435 cells were transfected with pcDNA3.1-SYK(L), pcDNA3.1-SYK(S) or pcDNA3.1 respectively, G418-resistant stable clones were pooled and the SYK expression was measured by Western blotting. Chemoinvasion assays were performed to study the effects of SYK(L) and SYK(S) on breast cancer cell invasion. **RESULTS:** SYK(L) and SYK(S) were simultaneously expressed in most detected breast cancer cells. Pooled SYK(L) and SYK(S) stable clones were made by Fugene 6 transfection and G418 selection. The expression of SYK(L) suppressed the invasive ability of breast cancer cells, while SYK(S) didn't. **CONCLUSION:** The simultaneously expression of SYK(L) and SYK(S) in breast cancer cells is a common phenomenon. Among SYK(L) and SYK(S), only SYK(L) protein is capable of suppressing the invasion of breast cancer cells.

Key words [Protein-tyrosine kinase](#) [Breast neoplasms](#) [Neoplasm invasiveness](#)

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