

论著

## 子宫内膜腺癌细胞系特异性结合短肽筛选及分析

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**摘要** 目的和方法: 用噬菌体随机12肽库对人子宫内膜腺癌细胞系(EAC)进行全细胞筛选, 并通过特异性结合实验检验所筛选出的克隆的结合特异性。结果: 经过5轮“吸附-洗脱-扩增”, 噬菌体高度富集, 并得到1个结合特异性较强的克隆。结论: 利用噬菌体肽库可以简便、迅速地筛选出与EAC特异性结合的克隆, 为进一步研制子宫内膜癌的靶向药物提供实验依据。

**关键词** [子宫内膜肿瘤](#) [细胞系](#); [噬菌体层学](#)

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## Selection and analysis of targeted cell-binding mimicry peptides in endometrial adenocarcinoma cell line through random peptide phage display

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### Abstract

<FONT face=Verdana>AIM: To isolate targeted the peptides that binding and internalizing into endometrial carcinoma cell line EAC. METHODS: The tumor cells were screened five rounds of whole cell screen through the Ph.D.-12 phage display library. Analysis of the displayed peptides specific binding efficiency to the tumor cells was proceeded. The DNA of phages was extracted, sequenced and translated to the sequences of amino acid and analysis using computer software. RESULTS: After five biopannings, the isolated phages showed high specificity and strong affinity for their cognate cell types relative to different cell lines. Through sequencing, the sequences of displayed peptides were obtained. CONCLUSIONS: Whole cell screening against EAC cells through random phage peptide library can obtain phage peptides with a highly tissue specific binding and internalizing ability. The peptides do provide a basis for tumor's targeted delivery as therapy vector.</FONT>

**Key words** [Endometrial neoplasms](#) [Cell line](#); [Phage display](#)

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