عنوان مقاله:

Production of anti-MUC18 scFv and evaluation of its anti proliferation effects on breast cancer cell lines

محل انتشار:

يازدهمين كنگره بين المللي سرطان يستان (سال: 1394)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Mozafar Mohammadi - Faculty of advanced medical sciences and technologies, Shiraz University of Medical Sciences, Shiraz, Iran

Forough Nejatollahi - Recombinant antibody laboratory, Dept. of immunology, Shiraz University of Medical Sciences, .Shiraz, Iran

خلاصه مقاله:

Background: Breast cancer is the most common cancer in women in almost all countries. It accounts for 16% of all female cancers and 22.9% of invasive cancers in women. 18.2% of all cancer deaths worldwide, including both males and females, are from breast cancer. It has been shown that increased expression of MUC18 correlated with a poor prognosis in breast carcinoma. ScFvs (single chain Fv) are composed of variable heavy (VH) and variable light (VL) domains that are linked by a poly peptide linker. They display improved pharmacokinetic properties compared to an intact antibody. Our goal is production of high affinity anti-MUC18 scFv to destroying the breast cancer cells.Materials and Methods: 4 rounds panning carried out to selecting scFv against MUC18. To evaluate the expression and also affinity of the selected anti- MUC18 scFv, SDS PAGE, western blotting and ELISA tests were done, respectively. Flow cytometry was done to cell binding analysis. Cell cytotoxicity was assessed by MTT assay and apoptosis test. Results: According to ELISA and Flow cytometry analyses results, scFv with high affinity was selected against MUC18. MTT assay and apoptosis test showed the appropriate toxicity on breast cancer cell line by anti-MUC18 scFv .Conclusion: .Our scFv can be used as anticancer agent against breast cancer cells

کلمات کلیدی: scFv, MUC18, Breast cancer

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