

## عنوان مقاله:

Flow cytometric analysis of CK19 expression in Her2 positive subtype of breast cancer

## محل انتشار:

یازدهمین کنگره بین المللی سرطان پستان (سال: 1394)

تعداد صفحات اصل مقاله: 2

## نویسندگان:

Zahra Orafa - Department of Molecular Biology, Pasteur Institute of Iran, Tehran, Iran

Mahdiyeh Motamedirad - Department of Virology, Pasteur Institute of Iran, Tehran, Iran

Mana Oloomi - Department of Molecular Biology, Pasteur Institute of Iran, Tehran, Iran

Nasrin Karimi - Department of Molecular Biology, Pasteur Institute of Iran, Tehran, Iran

## خلاصه مقاله:

Background: Cytokeratin 19 (CK19), a part of the cytoskeleton of epithelial cells is a sensitive and specific marker that expressed in breast cancer. CK19 has clinically been used as a marker for confirming the presence of metastatic cells in blood. On the other hand, breast cancer cell lines are excellent experimental models to investigate biological functions of clinically important in vitro conditions. Materials and methods: Breast cancer cell line (SKBR3) and cervical cancer cell line (HeLa) as a negative control were cultured in RPMI 1640 (supplemented with fetal bovine serum (FBS) and penicillin-streptomycin antibiotic). Then, cell lines were fixed with 4% paraformaldehyde and permeabilized with ice-cold 100% methanol. The cell lines were blocked with 1% BSA and were stained with CK19 antibody. Finally, CK19 expression was elevated by flow cytometric analysis. Results: flow cytometry was used to elevate the CK19 expression in Her2 positive subtype of breast cancer. CK19 expression was detected in SKBR3 cell lines Discussion: SKBR3 cell line belonged to Her2 positive subtype of breast cancer (ER- / PR- / Her-2+) that CK19 expression can be correlated with Her2 signaling in this cancer. Her2 drives cell proliferation and invasion by regulating this marker. herefore, tumor cells whit CK19 might constitute a biologically active subset of breast cancer cells with high metastatic properties. In conclusion, CK19 is an epithelial marker that it is expressed in Her2 positive .subtype of breast cancer. CK19 expression in this subtype should be more considered in molecular cancer research

## کلمات کلیدی:

Breast cancer, CK19, Cell line, Flow cytometry, Her2 positive subtype

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/726732>

