

Fabrication of cancer cell chip using modified RGD peptide

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Most of the common materials have sufficient mechanical stability and elasticity as well as desired stability towards degradation, and are non-toxic. One important problem is inadequate interaction between metal and cells. Metals usually don't show biocompatibility, therefore we try to make a condition to cells using peptides. We used 3 kinds of peptide which is CRGD, CRGD-MAP, RGD-MAP-C, and immobilize it on the gold plate. We confirmed the peptide with AFM and growing the cells on the peptide modified surface. The cells' growing pattern and the relation with peptide pattern could be the new approach to the substrate modification technology to apply to the cell chip that can detect the cells by electrical or electrochemical methods.

Acknowledgments : This research was supported by Seoul R&BD Program(10816) and by the Nano/Bio Science & Technology Program (2006-00955) of the Ministry of Science and Technology, supported by the Korea government(MOST) (2006-05374).