

3D printed “LEGO” device for tumor migration and metastasis study

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ABSTRACT

Tumor metastasis causes the death in most cancer patients. During metastasis, cell migrated from primary tumor was the very first step and study the tumor cell migration and interaction with somatic cells is therefore of great important. Development of *in vitro* technology that can quantitatively gain migration and cell-cell interaction data is there high desirable. Conventional methods for study tumor migration and cell-cell interaction are plagued by inaccessible to get quantitative data or complication of microfabrication process which brings into additional efforts rather than study the biological question itself. Herein, we developed a 3D printed “LEGO”-like device combined with a quantitative data gaining process which can be used for investigation into tumor cell migration process dynamically at single cell resolution and tumor-stromal interactions with high flexibility.