

Selection of RNA Aptamer specific binding to CTHRC1 protein for HCC Treatment

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HCC is the most frequent type and the fifth most probable tumor. The most famous biomarker for HCC is AFP. AFP is famous biomarker, but this protein has few negatives. AFP isn't expressed in the first stage. Therefore, we use another biomarker, CTHRC1 protein. CTHRC1 protein is overexpressed in HCC and has an important role in migration and invasion. The reasons of using aptamers to find out CTHRC1 protein is aptamer's few advantages. Aptamers have high affinity to their target, less sensitive to high temperature and various applications. We select RNA aptamer candidates using SELEX process. Using SPR process to find out which aptamer has high affinity to target. This study was supported by Fund of Biomedical Research Institute, Chonbuk National University Hospital (20120801002). This work was supported by the Human Resource Training Program for Regional Innovation and Creativity through the Ministry of Education and National Research Foundation of Korea(NRF-2015H1C1A1035921).