

## The effect of COL8A1 enhancing expression on mice hepatocarcinoma cell lymphatic metastasis

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**Objectives:** By applying enhanced cDNA transfection in mice with hepatocellular carcinoma without metastatic cell lines (Hepa1-6) COL8A1, and observing cancer cell proliferation, invasion, tumor formation in vivo, this study aims at regulating the influence of COL8A1 expression on tumor cell drug sensitivity and tumorigenicity.

**Methods:** The COL8A1 expression in transfected Hepa1-6 cells was analyzed with the use of RT-PCR, Western Blot. The transfection of 'Hepa1-6 cells of invasion ability' was tested in invasive experiments in vivo and transfection of 'Hepa1-6 cells of the tumorigenic ability' was tested in vivo tumor. Transfection of Hepa1-6 cells proliferation and its effect on d-limonene susceptibility was analyzed using the method of MTT.

**Results:** Expression of COL8A1 in experimental group cell of Hepa1-6 / COL8A1 showed a significant increase when compared to un-transfected cells of Hepa1-6 control group and empty plasmid transfected cells of Hepa1-6 / Mock control group.

The ability of cell proliferation, matrix adhesion through the invasion and tumorigenic in vivo were enhanced and at the same time the cells of d-limonene susceptibility were down-regulated.

**Conclusion:** COL8A1 expression in hepatocarcinoma cells in mice is related to tumor cell proliferation, invasion, in vivo tumorigenicity and antitumor drug sensitivity, which may provide new targets for tumor chemical therapy.

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