

ЗАКЛЮЧЕНИЕ

Локализация доменов белка LIMCH1 в опухолевых клетках рака молочной железы гетерогенна и обнаруживается во всех клеточных компартаментах. На модели морфологической гетерогенности было показано, что цитоплазматическая локализация домена LIM в одиночных клетках опухоли может быть связана с разными вариантами индивидуального типа инвазии. Функции белка LIMCH1 в опухолевых клетках не ограничены влиянием на клеточную подвижность, ядерная локализация домена LIM в опухолевых клетках может быть связана с регуляторной функцией белка.

ФИНАНСИРОВАНИЕ РАБОТЫ

Работа выполнена при финансовой поддержке Российского фонда фундаментальных исследований (проект № 18-515-16001).

СОБЛЮДЕНИЕ ЭТИЧЕСКИХ СТАНДАРТОВ

У всех обследованных лиц было получено добровольное информированное согласие на проведение манипуляций в соответствии с требованиями локального этического комитета НИИ онкологии Томского НИМЦ (протокол № 7 от 24 мая 2021 г.).

КОНФЛИКТ ИНТЕРЕСОВ

Авторы заявляют об отсутствии конфликта интересов.

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Characteristic of LIMCH1 Protein Localization in Tumor Cells in Breast Cancer

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The LIMCH1 protein reduces cell motility by regulating the activity of NM-IIA, that may be critical for the invasion of tumor cells. At the moment, the role of the LIMCH1 protein in cancer progression is poorly understood. In this work we study features of the localization of the LIMCH1 protein domains in various compartments of tumor cells in patients with breast cancer and the role of the LIMCH1 protein domains in collective or individual migration of

tumor cells. Morphological heterogeneity was used as a model system for study migration of tumor cells. Nuclear localization of the LIMCH1 protein was found in tumor cells in patients with breast cancer. This suggests that the functions of the LIMCH1 protein in tumor cells are not limited to the effect on cell motility. Much more often the LIMCH1 protein was found in the cytoplasm of single tumor cells, compared with multicellular structures. This can be regarded as an indicator of the amoeboid type of motility, since single tumor cells is associated with hematogenous metastasis. It can be assumed that the main function of the LIMCH1 protein in multicellular structures is to provide intercellular adhesion.

Keywords: LIMCH1, breast cancer, invasion, morphological heterogeneity