

Abstract

Cervical cancer is the fourth most prevalent cancer and is the primary cause of mortality among women on a global scale. It is deadly once metastasize and therefore its early detection and prevention of its metastasis was crucial for the survival of the patient. Treatment targeting the prevention of metastasis was a necessity. *Laportea decumana* is a plant which has been shown to possess anti-cancer capabilities through the induction of cancer cell apoptosis. However, its effect on cancer cell migration remains relatively unexplored. Therefore, the capability of *L.decumana* as an anti-metastatic agent must be explored. Transwell-migration assay was performed to quantify the migration of HeLa cells and qRT-PCR was performed to study the effect of *L.decumana* extract on the expression of EMT markers. Treatment of HeLa cells with 50 µg/mL and 100 µg/mL of *Laportea decumana* extract shows a significant increase in the number of migrated HeLa cells. *L.decumana* extract was also shown to increase the expression of EMT markers vimentin, fibronectin, and E-cadherin

Keywords: *Laportea decumana*; Anti-cancer; EMT; HeLa; Migration