



Inactivation of Rab23 inhibits the invasion and motility of pancreatic duct adenocarcinoma

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ABSTRACT. Pancreatic ductal adenocarcinoma (PDAC) is characterized by a poor prognosis and high mortality rate. In this study, we investigated the expression of Rab23 in non-tumor pancreatic tissues and PDACs via immunohistochemistry. Rab23 was found in 39 of 58 (67.2%) and in 11 of 30 (36.7%) of the PDAC and non-tumor pancreatic tissue samples ($P = 0.0073$), respectively. There were significant correlations between Rab23 expression and unfavorable variables, including cancer differentiation level ($P = 0.0089$), lymph nodal ($P = 0.0099$), and distant metastases ($P = 0.0173$). Inactivation with small interfering RNA against Rab23 in the human pancreatic cancer cell line Panc-1 inhibited the migration and invasive potential of the cells. Our data provide new insight into the essential role of Rab23 in PDAC invasion and metastasis and suggest that Rab23 expression is a useful indicator of metastatic potential; hence, it may be a new therapeutic target for this common malignancy.

Key words: Migration; Pancreatic duct adenocarcinoma; Rab23; siRNA