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学位論文の題名	<p>Girdin, a regulator of cell motility, is a potential prognostic marker for esophageal squamous cell carcinoma (細胞の移動の調節因子である Girdin は食道扁平上皮癌の予後マーカーとなりうる)</p> <p>ONCOLOGY REPORTS Vol. 29: 2127-2132, 2013</p>
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Girdin, an actin-binding Akt substrate, regulates actin reconstruction and Akt-dependent cell migration in fibroblasts and a human breast cancer cell line. We examined whether Girdin was also involved in the migration of esophageal squamous cell carcinoma (ESCC) cells. First, immunofluorescent staining and migration assays were performed, using KYSE cell lines, to examine whether Girdin was involved in the migration of ESCC cells. Upon EGF stimulation, Girdin colocalized with filamentous actin in the lamellipodia as determined by immunofluorescent staining. In migration assays, cell migration was significantly reduced in KYSE cell lines transfected with Girdin siRNA compared with the negative control. Next, we examined the relationship between Girdin expression and clinical data, using specimens resected from ESCC patients. In immunohistochemical analyses using specimens resected from ESCC patients, overall survival was significantly longer in cases showing higher Girdin expression than in cases with lower Girdin expression. Taken together, it appears that Girdin is involved in the migration of ESCC cells. The level of Girdin expression correlated inversely with the survival of ESCC patients. Therefore, in ESCC, Girdin is expected to be a prognostic marker and to be a therapeutic target, as well.