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MiR-186-5p upregulation inhibits proliferation, metastasis and epithelial-to-mesenchymal transition of colorectal cancer cell by targeting ZEB1

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MiR-186-5p upregulation inhibits proliferation, metastasis and epithelial-to-mesenchymal transition of colorectal cancer cell by targeting ZEB1

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Abstract

MicroRNA-186-5p (miR-186-5p) is upregulated and exhibits as a crucial oncogene in various human tumors. However, the functions and underlying mechanisms of this microRNA on colorectal cancer remain largely unknown. Here, we report that miR-186-5p share a lower expression in colorectal cancer cell lines (HT116, H29, SW620 and LoVo) than in normal colonic epithelial cell line NCM460. MiR-186-5p overexpression inhibits proliferation, metastasis and epithelial-to-mesenchymal transition (EMT) of colorectal cancer cell line LoVo. Zinc Finger E-Box Binding Homeobox 1(ZEB1), an EMT related marker, is predicted as a target of miR-186-5p. Luciferase reporter assay, qRT-PCR and western blot analysis showed that miR-186-5p directly