

MicroRNAs (miRNAs) are small noncoding RNAs that act as posttranscriptional regulators of gene expression, and are frequently altered in human neoplasias. Here, we have analyzed the miRNA expression profile of human gonadotroph adenomas versus normal pituitary tissue using a miRNACHIP microarray. We demonstrate that miRNA-410 is downregulated in gonadotroph adenomas when compared with normal pituitary gland. We validate CCNB1 as target of miRNA-410 since its overexpression reduces CCNB1 at protein and mRNA levels, decreasing cell proliferation. In conclusion, our study suggests that the downregulation of miRNA-410 plays a role in the behavior of gonadotroph tumors.