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EDITORS' CHOICE

Molecular Biology From MicroRNA to Carcinogenesis

Guy Riddihough

Science, AAAS, Washington, DC 20005, USA

Misregulation of microRNA (miRNA) function has been implicated in cancer. However, the precise role of miRNAs in tumorigenesis has been unclear. High mobility group A2 protein (Hmga2) is a small, non-histone, chromatin-associated protein found in a number of benign and malignant tumors, where the gene is often truncated at the 3' end. Mayr *et al.* now show that it is the loss of the noncoding 3' untranslated region of the *Hmga2* messenger RNA, and specifically of regulator sites for the *let-7* miRNA, that causes the overexpression of Hmga2, and that this overexpression contributes to the progression of carcinogenesis both in a tissue culture assay and in nude mice.

C. Mayr, M. T. Hemann, D. P. Bartel, Disrupting the pairing between *let-7* and *Hmga2* enhances oncogenic transformation. *Science* **315**, 1576-1579 (2007). [[Abstract](#)] [[Full Text](#)]

Citation: G. Riddihough, From MicroRNA to Carcinogenesis. *Sci. STKE* **2007**, tw97 (2007).

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Sci. STKE **2007** (387), pe25. [DOI: 10.1126/stke.3872007pe25]

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L. Bryan Ray (6 February 2007)

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