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Supplemental Information

Antiviral RNA Silencing in Mammals:

No News Is Not Good News

Shou-Wei Ding and Olivier Voinnet

Supplemental Discussion

We note that the authors use Dicer-/- cells of unspecified nature in Figure 1C-D and indeed in various parts of the result section. An inspection of the "Experimental procedures" section shows that these cells were obtained from Phil Sharp's laboratory at the MIT and the reference provided (Calabrese et al. PNAS, 2007) indicates that they are Dicer--inducible mouse ES cells. Surprisingly, the authors have apparently cultured these cells in the same medium used for their differentiated MEFs, suggesting that they have favored, in the process, the selection of rare Dicer+/+ cells because there is no procedure known to us that could maintain the integrity of ES cells (let alone Dicer-/- ES cells) under such growth conditions (Jay and Ciaudo, 2013; see also: http://stemcells.nih.gov/info/scireport/pages/appendixb.aspx). Thus, not only ES cells cannot be used as controls for experiments conducted in completely unrelated MEFs (as is incorrectly done in Figure 1C), we also express some doubts about the Dicer-/- status of these cells. Consequently, the small RNA blots documented in Figure 1A should be stripped and re-probed with several miRNAs, and the absence of Dicer confirmed by Western analysis if these and other experiments employing these cells (Figure 2C, Figure 4A-B) were to be considered valid.

Supplemental Reference

Jay F, Ciaudo C. (2013). An RNA tool kit to study the status of mouse ES cells: sex determination and stemness. Methods. 63,85-92.