Retraction: ‘An endogenous, systemic RNAi pathway in plants’

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Retraction of: *The EMBO Journal* (2010) 29: 1699–1712. DOI: 10.1038/emboj.2010.65 | Published online 22 April 2010

The above article from *The EMBO Journal*, published online on 22 April 2010, has been retracted by agreement between the authors, the journal Chief Editor and Head of Scientific Publications, EMBO, Bernd Pulverer, and John Wiley & Sons Ltd. The authors’ and editors’ statements are as follows.

Authors’ statement

Following an investigation conducted by the *The EMBO Journal*, the corresponding authors were alerted of several image irregularities found in this paper. Patrice Dunoyer, who assembled the figures, acknowledges making the following errors during their preparation and that the other co-authors were unaware of them:

- Figure 3C (@GFP blot): Incorrect splicing of the blot led to a duplicated band improperly used for the final figure. Two dividers should have been also added to clearly indicate splicing of the original blot.
- Figure 3C (@IR71 blot): Background duplication was done during image editing instead of putting a divider between the *dcl234* samples and the *col0* samples to indicate splicing of the original blot.
- Figure 4A (@2039 blot): The blot shown in the right-hand side panel of the figure (*col0*, *O. pumila*, *C. rubella* samples) is a duplication of the @2039 signal of the three-first samples of the middle panel. In addition, duplicated sections in the middle panel @2039 were used to cover background noise. The first two and the last two lanes of the loading control (4A, middle panel) are duplicated and mirrored.
- Figure 4D and Supplementary Figure S3: The rRNA loading controls displayed are not the cognate ones. Detection of miR159, whose accumulation is unaltered by the mutations shown in Supplementary Figure S3, provides an internal control for equal loading in these experiments.

All authors consider that the core conclusions of the published paper remain valid; graft transmission of endogenous siRNAs has been confirmed in several independent studies. However, the authors admit that integrity of the scientific literature is compromised by the data manipulation and are therefore requesting the article to be retracted.

Olivier Voinnet and Patrice Dunoyer take full responsibility for having allowed the publication of this flawed article. All authors concur with this statement and wish to apologize for the inconvenience caused.

Editors’ statement

The authors provided to the journal images of source data to explain the majority of the serious image manipulations apparent in Figures 3C (GFP and IR71), 4A and 4D and Supplementary Figure S3.

We alert readers to the fact that a number of related papers are also subject to a corrigendum or to a retraction. At *The EMBO Journal*, these encompass the following:

- Haas G, Azevedo J, Moissiard G, Geldreich A, Himber C, Bureau M, Fukuhara T, Keller M, Voinnet O (2008) Nuclear import of CaMV P6 is required for infection and suppression of the RNA silencing factor DRB4. *EMBO J* 27: 2102–2112
- Brigneti G, Voinnet O, Li WX, Ji LH, Ding SW, Baulcombe DC (1998) Viral pathogenicity determinants are suppressors of transgene silencing in *Nicotiana benthamiana*. *EMBO J* 17: 6739–6746
- Schott G, Mari-Ordóñez A, Himber C, Alioua A, Voinnet O, Dunoyer P (2012) Differential effects of viral silencing suppressors on siRNA and miRNA loading support the existence of two distinct cellular pools of ARGONAUTE1. *EMBO J* 31: 2553–2565
- Hamilton A, Voinnet O, Chappell L, Baulcombe D (2002) Two classes of short interfering RNA in RNA silencing. *EMBO J* 21: 4671–4679