Correction to: Circular RNAs and RNase L in PKR activation and virus infection

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Correction to: Cell Biosci (2019) 9:43
https://doi.org/10.1186/s13578-019-0307-x

In the publication of this article [1], there are a few errors in the article.

This has now been included in this correction.

The error in Fig. 1: degraded circRNA.

Should instead read: degraded circRNA.

The corrected Fig. 1 is given here.

The error:

Nucleic acid receptors directly recognize and act on dsRNAs in different size to execute antiviral activities by blocking translation and inducing degradation and modification of pathogenic dsRNA.

Should instead read:

Nucleic acid receptors directly recognize and act on dsRNAs of different sizes to execute antiviral activities by blocking translation and inducing degradation and modification of pathogenic dsRNA.

The error:

Although the circular lariats are commonly produced by splicing of each pre-mRNA intron [3] and subject to digestion by a debranching enzyme DBR1 (debranching RNA lariats 1), the back-splicing derived circRNAs initially recognized in 1996 [4] are considerably in low production efficiency (< 1% of canonical splicing) and the functional potential of the back-splicing derived circRNAs remains elusive.

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The error:

These observations led the investigators looking into the question whether the circRNAs could form intramolecular RNA duplexes to bind and activate PKR.

Should instead read:

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The error:

Surprisingly, they discovered that each HeLa cell may contain ~ 9000–10,000 copies of circRNAs and each circRNA bears at least 1–4 intra-dsRNA regions in size of 16–26 bps, leading the authors to hypothesize that the short dsRNA region in a circRNA binds PKR in normal cell condition, but not activates PKR because of its short size and thus functions as a PKR suppressor.
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The error:

Further experimental approaches by ectopic expression of circRNAs or by stimulation of RNase L KO cells with poly I:C confirmed this important function of circRNAs in suppression of PKR activation and in innate immunity against EMCV infection.
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The error:

However, the report also raises many questions than answers for future investigation.

Should instead read:

However, the report also raises more questions than answers for future investigation.

Reference

1. Zheng ZM. Circular RNAs and RNase L in PKR activation and virus infection. Cell Biosci. 2019;9:43. https://doi.org/10.1186/s13578-019-0307-x.

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