

CORRECTION

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Correction: Transposon-derived introns as an element shaping the structure of eukaryotic genomes

Weronika Mikina¹, Paweł Hatacuc¹ and Rafał Milanowski^{1*}

Correction: *Mob DNA* 15, 15 (2024)

<https://doi.org/10.1186/s13100-024-00325-w>

Following publication of the original article [1], the authors corrected an error in Figure 2 and its legend.

Error: The original figure suggested the formation of a double strand cleavage of the DNA during introner insertion, resulting in free single-stranded 3' ends at the insertion site, which was an oversimplification. The legend to the figure has also been changed to indicate that the intron insertion shown is an experimentally unproven hypothetical mechanism.

The original article can be found online at <https://doi.org/10.1186/s13100-024-00325-w>.

*Correspondence:

Rafał Milanowski
r.milanowski@uw.edu.pl

¹ Institute of Evolutionary Biology, Faculty of Biology, Biological and Chemical Research Centre, University of Warsaw, Żwirki i Wigury 101, Warsaw 02-089, Poland



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The corrected Fig. 2 is given below:

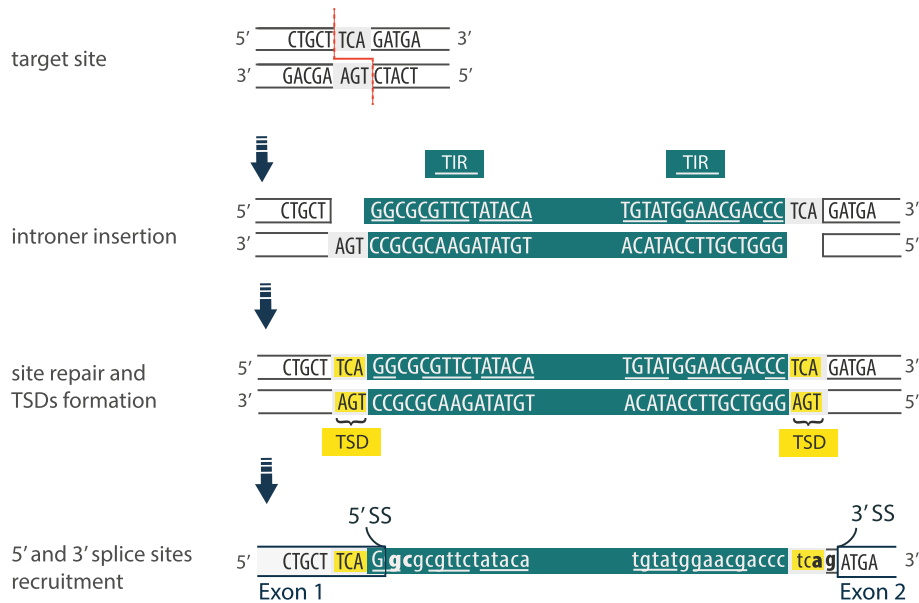


Fig. 2 The hypothesized mechanism of intron gain assisted by target site duplication (TSD) formation during insertion of an introner element with terminal inverted repeats (TIRs). Introner (marked in green) integrates into the TCA target sequence. Site repair results in the duplication of this sequence on each side of the introner. These short, duplicated TSD sequences are highlighted in yellow; the TIRs are underlined. Acquired donor and acceptor splicing sites (bold) of the newly gained intron (lowercase) are either introduced by the introner (5' gc or gt), or co-opted from TSD (3' ag). The example sequence originates from *M. pusilla* introner family IE1 [6] and illustrates the potential sequence of events leading to the IE-derived intron gain [17, 28]. The actual mechanisms of introner insertion are not known

The old version of Fig. 2:

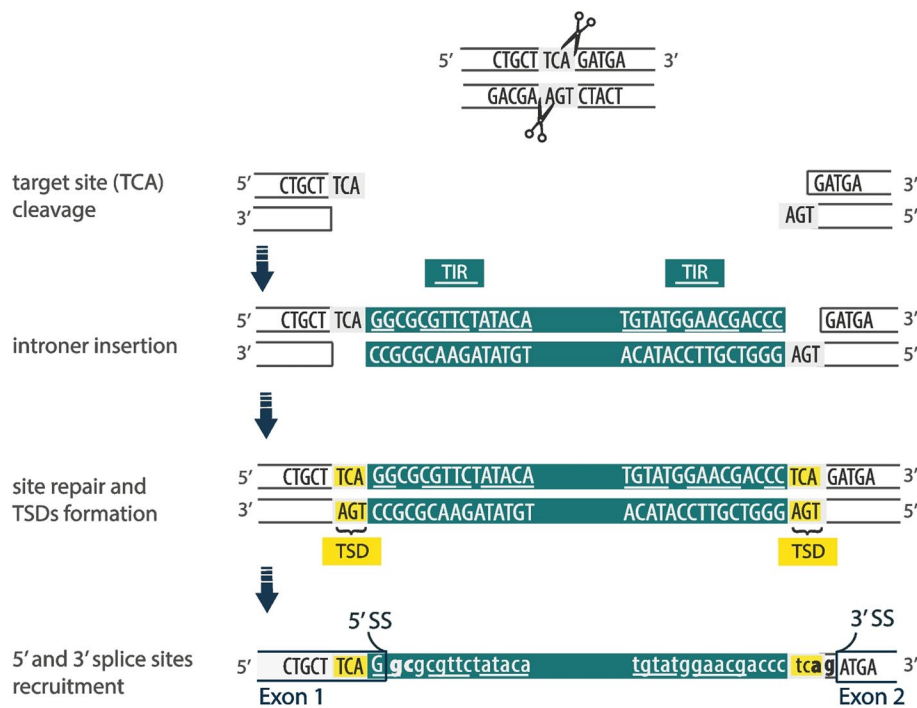


Fig. 2 Introner insertion leading to the formation of an intron. After transposase cuts the TCA site, introner (marked in green) integrates into the target sequence. Site repair results in the duplication of this sequence on each side of the introner. These short, duplicated sequences (TSD) are highlighted in yellow. Additionally, the terminal inverted repeats (TIR) are underlined. Restored splicing sites (bold) of newly gained intron (lowercase) are either carried by introner (5'), or co-opted from TSD (3'). The sequence originates from *M. pusilla* and illustrates the potential sequence of events leading to the IE-derived intron gain [17, 28]

The original article [1] has been updated.

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Reference

1. Mikina W, Halakuc P, Milanowski R. Transposon-derived introns as an element shaping the structure of eukaryotic genomes. *Mob DNA*. 2024;15:15. <https://doi.org/10.1186/s13100-024-00325-w>.