

Erratum

Erratum to "Hole transfer through DNA monitored by transient absorption of phenothiazine radical cation"

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Owing to an error at the Publishers, this paper was published without the following revisions.

In all instances, radical cations should have appeared as follows:

Ptz*+

On page 89, the last paragraph should have read:

The radical cation of Ptz (Ptz*+) has a distinct absorption peak at $\lambda_{\rm max} = 520$ nm with a large molar extinction coefficient ($\varepsilon = 9 \times 10^3 \ {\rm M}^{-1} \ {\rm cm}^{-1}$). ⁶ 5'-Ptz-conjugated ODNs (PtzODNn) were synthesized by automated solid-phase phosphoramidite method as reported. ⁷ Introduction of Ptz at a terminal site caused an increase in $T_{\rm m}$ for n = 1,3,5 PtzODNn ($T_{\rm m} = 36.7$, 36.4, 35.7°C) compared to unmodified ODNn ($T_{\rm m} = 35.5$, 35.5, 35.4°C), respectively. Since a similar UV-spectrum was observed for all PtzODNn (n=1,3,5), these PtzODNn were suggested to take an end-capping structure with π -electron overlap between the Ptz and bases. ⁸ The oxidation potential of Ptz ($E^0 = 0.76$ V versus NHE in CH₃CN) is lower than those of pyrene ($E^0 = 1.40$ V versus NHE in CH₃CN) and G ($E^0 = 1.47$ V versus NHE in CH₃CN). ⁵ In addition, oxidation potential of Ptz is even lower than that of 8-oxo-7,8-dihydroguanine (oxG: $E^0 = 1.09$ V versus NHE in CH₃CN). Therefore, hole transfer from both G*+ and oxG*+ to Ptz is expected to occur, in contrast to the pyrene-conjugated ODN where hole transfer from pyrene*+ to oxG was observed.

The following reference should have been cited in the final sentence on page 91:

12. Nakatani, K.; Dohno, C.; Saito, I. J. Am. Chem. Soc. 2001, 123, 9681.

The Publisher apologizes for this error and any inconvenience caused to the authors and all readers.

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