

Fluorescence Imaging of siRNA Delivery by PNA-based Probe

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Abstract: Small interfering RNAs (siRNAs) have been widely used for the study of gene functions due to their silencing abilities in a sequence-specific manner through an RNA interference process. T. Sato and co-workers synthesized a novel fluorescent probe, **Py-AA-TO**, consistent with thiazole orange (TO) and pyrene moieties in the C- and N-termini of peptide nucleic acids (PNAs). This probe selectively recognized 3'-overhanging nucleotides of siRNAs, and can be affinity-labeling agents to the analysis of the siRNA delivery process in living cells.

References:

1. T. Sato, Y. Sato, K Iwai, S. Kuge, S. Nishizawa, N. Teramae, *Chem. Commun.*, **2015**, *51*, 1421.
2. T. Sato, Y. Sato, K Iwai, S. Kuge, N. Teramae, S. Nishizawa, *Anal. Sci.*, **2015**, *31*, 315.