

## Tissue-specific drug delivery platforms based on DNA nanostructures

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Due to the complexity of in vivo environments, it is challenging to design a nanoconstruct that targets a specific tissue. In this study, we developed targeted drug carriers by screening a library of self-assembled nucleic acid (NA) nanostructures in vivo. We intravenously injected various NA nanostructures into mice and examined their biodistribution in major organs to discover

the intrinsic tissue specificity of NA nanostructure. We further utilized the tissue-specific NA nanostructures as carriers for targeted drug delivery. The study demonstrates that the library-based strategy to discover targeted drug carriers can be an efficient way to develop nanomedicines with tissue specificity and enhanced potency.

### References

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