

**Double-stranded DNA-scaffolded fluorescent probes for fluorescence
imaging of cell-surface molecules**

Zhanghua Liu,^{ab*} Yang Liu,^{ab*} Yanan Sun,^a Guo Chen^{ab} and Yong Chen^{†ab}

^a Nanoscale Science and Technology Laboratory, Institute for Advanced Study,
Nanchang University, Nanchang, Jiangxi 330031, P. R. China

^b College of Life Sciences, Nanchang University, Nanchang, Jiangxi 330031, P. R.
China

* The authors contributed equally to this study.

† Corresponding author. E-mail: dr_yongchen@hotmail.com

Supplementary Information

The nucleotide sequences of the DNA molecules used for the fluorescent probes.

~150 bp DNA (148 bp):

TAAGCGTTGGCGGAGCGTCGGTGTAGCACTCTGCGCGCCCGCTCTTCTGCTGCTGTTTGTCTACTTCCTCC
TGCTTCCCCGCCGCCGCCGCCATCATGAGGGAAATCGTGCACTTGCAGGCCGCAGTGCGGCAACCAA
ATCGGCG.

~1 kb DNA (1,024 bp):

TAAGCGTTGGCGGAGCGTCGGTGTAGCACTCTGCGCGCCCGCTCTTCTGCTGCTGTTTGTCTACTTCCTCC
TGCTTCCCCGCCGCCGCCGCCATCATGAGGGAAATCGTGCACTTGCAGGCCGCAGTGCGGCAACCAA
ATCGGCGCAAGTTTTGGGAGGTGATACCAGCTCGTAGAAAACACACAGCGATGAGCACGGCATCGACCC
CACGGGCACCTACCACGGGGACAGCGACCTGCAGCTGGAACGCATCAACGTGTACTACAATGAGGCCAC
CGGCGGCAAGTACGTGCCCCGCGCCGTGCTCGTGGATCTGGAGCCCGGCACCATGGACTCCGTGCGCTC
GGGGCCCTTCGGGCAGATCTTCCGGCCGGACAACCTCGTTTTCGGTCAGAGTGGTGCTGGGAACAACCTGG
GCCAAGGGGCACTACACAGAAGGCGCGGAGCTGGTGGACTCGGTGCTGGATGTTGTGAGAAAGGAGGC
TGAGACTGTGACTGCCTGCAGGGTTTCCAGCTGACCCACTCCCTGGGTGGGGGACTGGGTCTGGGATG
GGTACCCTCCTCATCAGCAAGATCCGGGAGGAGTACCCAGACAGGATCATGAACACGTTTAGTGTGGTG
CTTCGCCCAAAGTGTGAGACACAGTGGTGGAGCCCTACAACGCCACCCTCTCAGTCCACCAGCTCGTAGA
AAACACAGACGAGACCTACTGCATTGATAACGAAGCTCTCTACGACATTTGCTTCAGAACCCTAAAGCTGA
CCACGCCACCTATGGTGACCTGAACCACCTGGTGTCTGCTACCATGAGTGGGGTCACCACCTGCCTGCGC
TTCCAGGCCAGCTCAATGCTGACCTGCGGAAGCTGGCTGTGAACATGGTCCCGTTTCCCCGGCTGCACTT
CTTCATGCCCCGCTTTGCCCCACTGACCAGCCGGGGCAGCCAGCAGTACCGGGCGCTGACCGTGCCCGAG
CTCACCAGCAGATGTTTGATGCCAAGAACATGATGGCTGCCTGCG.

~1.6 kb DNA (1,597 bp):

AGAGTTTGATCATGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAACGGTAACAGG
AAGAAGCTTGCTCTTTGCTGACGAGTGGCGGACGGGTGAGTAATGTCTGGGAAACTGCCTGATGGAGGG
GGATAACTACTGGAAACGGTAGCTAATAACCGCATAACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCC
TCTTGCCATCGGATGTGCCAGATGGGATTAGCTAGTAGGTGGGGTAACGGCTCACCTAGGCGACGATCC
CTAGCTGGTCTGAGAGGATGACCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAG
CAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCG

GGTTGTAAAGTACTTTTCAGCGGGGAGGAAGGGAGTAAAGTTAATACCTTTGCTCATTGACGTTACCCGCA
GAAGAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGTAATACGGAGGGTGCAAGCGTTAATCGGAATT
ACTGGGCGTAAAGCGCACGCAGGCGGTTTGTAAAGTCAGATGTGAAATCCCCGGGCTCAACCTGGGAAC
TGCATCTGATACTGGCAAGCTTGAGTCTCGTAGAGGGGGGTAGAAGTGGGGAATATTGCACAATGGGCG
CAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCATTCCAGGTGTAGCGGTGAAATGCGTAGAGA
TCTGGAGGAATACCGGTGGCGAAGGCGGGCCCCCTGGACGAAGACTGACGCTCAGGTGCGAAAGCGTGG
GGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGTGACTTGGAGGTTGTGCCCTTG
AGGCGTGGCTTCCGGAGCTAACGCGTTAAGTCGACCGCTGGGGAGTACGGCCGCAAGGTTAAACTCA
AATGAATTGACGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTAATTTCGATGCAACGCGAAGAACCTT
ACCTGGTCTTGACATCCACGGAAGTTTTTCAGAGATGAGAATGTGCCTTCGGGAACCGTGAGACAGGTGCT
GCATGGCTGTCGTCAGCTCGTGTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTTT
GTTGCCAGCGGTCCGGCCGGGAACTCAAAGGAGACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGA
CGTCAAGTCATCATGGCCCTTACGACCAGGGCTACACACGTGCTACAATGGCGCATACAAAGAGAAGCGA
CCTCGCGAGAGCAAGCGGACCTCATAAAGTGCCTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATG
AAGTCGGAATCGCTAGTAATCGTGGATCAGAATGCCACGGTGAATACGTTCCCGGGCCTTGTACACACCG
CCCGTCACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACTT
TGTGATTCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCTT
A.

~3.4 kb DNA (3,419 bp):

GCTAAAAGGACAGGCAATGGACGCCCCCCCCCCCCACCCAACCACAGGCCTCCTCTCTGAGCCACGGGTGA
GCGGTGCAGGTTCTGCTGTTCTGGAGGGCCTGAGTCCCACCCAGCACCTCATAAACAGGGTCTCCCCAG
GGCTGCTGCAGTAGGCATCAACGCCAGGGTGCAAAATGCCTCAGGGAGCCAAGGCTGAGCCAGGGGAG
TGAGAAGGAGCATGTGGAAGTGCGTTTTGGAGAGGCAGCTGCGCAGGCTGTCAGCAGGCTCCGGCCGCT
TCTATAGACAGCATGACACCAAGGGCAGTGACCTCATTCCACAGGCTGAGTCCAGCCAGCCAGCCAAGCA
TCACCAGCCAGACGATTGACCCTAACGGACCAACCAACCCGTAACGACCCCTCCTACCATAACCAAGTAGCC
AGCCAGCCCATAACCAAGCCAATTATCTATAACCAAGCCACCTGACCATAGCCAAACAACCAAGCCGGCCAC
CAGTAGCATTACAGCCCTCAGCTGGCCCTGAGGGTTTGGAGACAGGTCGAGGGTCATGCCTGTCTGTCCA
GGAGACAGTCACAGGCCCCGAAAGCTCTGCCCCACTTGGTGTGTGGGAGAAGAGGCCGGCAGGTGACC
GAAGCATCTCTGTTCTGATAACCGGGACCCGCCCTGTCTCTGCCAACCCAGCAGGGACGGCACCCCTCTG

GGCAGCTCCACATGGCACGTTTGGATTTCAGGTTTCGATCCGACCGGGACAAGTTCGTCATCTTCCTCGATG
TGAAGCACTTCTCCCCGAGGACCTACCGTGAAGGTGCAGGACGACTTTGTGGAGATCCACGGAAAGC
ACAACGAGCGCCAGGTGAGCCCAGGCACTGAGAGGTGGGAGAGGGGGGCGAGTTGGGCGCGAGGACA
AGGGGGTACGCGCGGGCACGACCGGGCCTGCACACCTGCACCATGCCTTCAACCCTGGGAGAGGGACGC
TCTCCAGGGGACCCCGAATCAGGCCTGGCTTTTCCCAAGGGAGGGGGCCGTGCCACCTGAGCACAGCCA
GCCCCCTCCGGTGACAGAGGTACCATTTCCGAGCTAATGTGGCTCAGGGATCCAGGTTAGGGTCCCTTC
CCGGGCTGCACCCAGCCGTCGCCAGCTCCATCCCTGTCACCTGGATGCCAGGGTGGTCTTAGAAAGAACC
CCAGGAAGTGGGAGTGCCCCGGGTGGCCGCCTCTAGCCAGTGACATCTTCACATGAACCTACCTGAG
GAAGCCAGTCCCCGACGGCATAGCTGCATCCGCTTGGAATGCTTTACAGGCATTGACACCTTCGCTCACA
GCAGCACTTTGGAACCACTGTCCTCATTATTCCAGGGCACGGCTGGGGAACAAGGGGGTCTCAGCCTGC
TGGGTCCACAGCTAGTACCGGGCAGGTGGACGGGAGCTTCTCCCCACAGTCACCCTGATGCCCCGCTCT
TGCTCGGCTGGAGGCCTCGGATCTCCGTGGTGTGAGGGAGCCGGGGCACTGGAGCCCTGGTGACCTGC
ATCTCCTGGCGGAGCCGGGAAGAGCTCATGGACTGTACAGATGGACAGTGCCCCGCGGGGGCTGGAG
AGCAGAGTGGGGCTGGAAGGTGGAACCTTAGCCAAAGTCTTGTTTTCTTTGGCCAGGGTCTCTTTCA
ATGGCTGGAGAAGGTGGTGTGGGGGGTGAACGCTGACCTCCTCATGTGCTGCCCCCTCCCTCGCTGGGC
CCGGTAAAGCCCCACGTAGCCCCAGCCAGCCTGGAACATGCTTCTGAGCTCCAGCTCTTGGTCTTTGC
ACCCAGTGGAGGAGGAGGTGAGCCAGGGAGCTGAGTCTGCGGTTTAGGGCGTCCAGGGGACGTGGAA
GCATGTGGGTGCTCTGGCCACATTAGGTAGGGCTGCAGAGACCTGGGCTAGAGCAGTCTGCGGGGTCT
GGAAGGGGAAGACTGGCTGAGGTGCGGGGCCTGGTCTGGAATGATCCTGCGATTTTGGAGTGAAGCCA
TGAGGCGGGAAGAGACAACCCCCGCGGGGAATAGCCCGGCAAGTGCCACGAGGCCAGGCTGAGGTC
CAGAGAAGCAGGGGCATGAATCCATAAATCCCAGGGGGCCTGGCCATGGGATGTGCTGGCTGCACCCGG
CCCCTGTGAGAGCCCCCGCAGGCTGGCCCCCTTCTGCAGTCAGTGGGGCTGGGGCAGCTTCTCTGGCATG
GGGCGAGGCAGCCGCTGCACAGTGGCCCCCTGACTGTGCGCCCCACCCTCTCCAGGACGACCACGGC
TACATTTCCCGTGAGTTCCACCGCCGCTACCGCCTGCCGTCCAACGTGGACCAGTCGGCCCTCTCTTGCTCC
CTGTCTGCCGATGGCATGCTGACCTTCTGTGGCCCCAAGATCCAGACTGGCCTGGATGCCACCCACGCCG
AGCGAGCCATCCCCGTGTGCGGGAGGAGAAGCCACCTCGGCTCCCTCGTCTAAGCAGGCATTGCCTC
GGCTGGCTCCCCTGCAGCCCTGGCCATCATGGGGGAGCACCTGAGGGCGGGGTGTCTGTCTTCCTTT
GCTTCCCTTTTTCTTTCCACCTTCTCACATGGAATGAGGGTTTGAGAGAGCAGCCAGGAGAGCTTAGGG
TCTCAGGGTGTCCAGACCCCGACACCGGCCAGTGGCGGAAGTGACCGCACCTCACACTCCTTTAGATAG
CAGCCTGGCTCCCCTGGGGTGCAGGCGCCTCAACTCTGCTGAGGGTCCAGAAGGAGGGGGTGACCTCCG

GCCAGGTGCCTCCTGACACACCTGCAGCCTCCCTCCGCGGCGGGCCCTGCCCACACCTCCTGGGGCGCGT
GAGGCCCCGTGGGGCCGGGGCTTCTGTGCACCTGGGCTCTCGCGGCCTCTTCTCTCAGACCGTCTTCCTCCA
ACCCCTCTATGTAGTGCCGCTCTTGGGGACATGGGTCGCCCATGAGAGCGCAGCCCGCGGAATCAATAA
ACAGCAGGTGATACAAGCAACCCGCCGTCTGCTGGTGCTGTCTCCATCAGGGGCGCGAGGGGCAGGAGG
GCGGCGCCGGGAGGGAGGACAGCGGGGTCTCCTGCTCGCGTTGGACCCGGTGGCCTCGGAACGATGGG
GTCGCTGCGTCCCTTCTTCTCCTGAGCTCAAGCGCCTCCCTCCACACTGGGCTGGAAGGAGAGGTTTTG
GGGGCAGAGCCTCTGATGGGAAAGGGACTGGGGAGCACTTCCGAGAGCTGGGGGCGGGGAGGGACCT
GGAAGGGGCTGCAGGGAATGGAGGGAGGCCGGGCTCCTTCTCTGTCCGCGCCGGCACCGGGGCGGGA
CGCCAGCCCTGGCCTCCTTCTGCGGGGCCGTCCGGTCTCTCGGGGTCTGCTGGGTCGTCTGTTCTCTCG
GGGTCC.