

Supplementary Materials: The following are available online at www.mdpi.com/xxx/s1, Table S1: Kinetic data of hybridisation of dye-labelled analytes, measured on a CMD200M surface in HBS at 20°C.

Table S1: Kinetic data of hybridisation of dye-labelled analytes measured on a CMD200M surface in HBS at 20°C.

| Probe | Analyte | $k_{on}/ 10^5 \text{ mol}^{-1}\text{s}^{-1}$ | k_{off}/ s^{-1} | K_D/ nM | RU(max) | χ^2 |
|--------|------------|--|--------------------------|------------------|---------|----------|
| Bio34 | CY3-7n | 18.42(10) | 0.0253(2) | 13.8 | 4.6 | 0.03 |
| | 3CY3-7n | 11.58(4) | 0.0410(1) | 35.0 | 20.3 | 0.07 |
| | CY3-7PEG | 10.61(7) | 0.0566(2) | 53.3 | 4.6 | 0.03 |
| | CY3B-7 | 8.53(3) | 0.0495(1) | 58.0 | 10.3 | 0.02 |
| | DY547-7 | 3.17(1) | 0.0592(1) | 186 | 21.2 | 0.04 |
| | DY530-7 | 2.74(1) | 0.0346(1) | 126 | 7.3 | 0.02 |
| | TAMRA-7 | 5.47(7) | 0.1006(10) | 184 | 3.5 | 0.03 |
| | TexasRed-7 | 13.45(5) | 0.0582(2) | 43.2 | 4.8 | 0.08 |
| | ATTO532-7 | 9.88(3) | 0.142(1) | 200 | 10.6 | 0.01 |
| | ATTO550-7 | 18.52(4) | 0.0337(1) | 18.2 | 10.5 | 0.02 |
| Bio34r | CY5-7 | 38.1(3) | 0.0819(6) | 21.5 | 9.1 | 0.04 |
| | DY630-7 | 9.91(5) | 0.0561(2) | 56.5 | 6.7 | 0.04 |
| | ATTO647-7N | 37.1(1) | 0.0589(1) | 15.9 | 7.0 | 0.03 |
| | MB-7 | 9.36(3) | 0.0187(1) | 20.0 | 22.1 | 0.20 |
| | FAM-7 | 4.02(2) | 0.1653(1) | 412 | 11.5 | 0.02 |
| | DY548-7 | 1.45(1) | 0.0435(2) | 301 | 5.3 | 0.03 |
| | DY549-7 | 1.44(2) | 0.0459(2) | 319 | 3.6 | 0.03 |
| | 3CY3-7m | 13.81(14) | 0.1564(1) | 113 | 10.3 | 0.10 |
| | 5CY3-7m | 14.74(13) | 0.0847(1) | 57.5 | 9.5 | 0.05 |
| | 3CY3-7m | 17.03(13) | 0.2758(2) | 162 | 5.0 | 0.01 |
| TLoG | 5CY3-7m | 13.28(10) | 0.1387(1) | 104 | 8.7 | 0.06 |