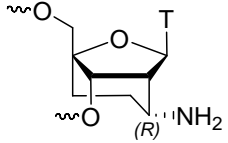
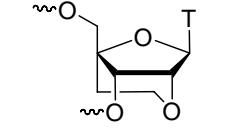


| Entry  | Modification structure  | Sequence                             | MS (MH <sup>+</sup> ) |          | With DNA |              | With RNA |              |
|--------|---|--------------------------------------|-----------------------|----------|----------|--------------|----------|--------------|
|        |   |                                      | Cacl.                 | Found    | $T_m$    | $\Delta T_m$ | $T_m$    | $\Delta T_m$ |
| AON 22 |  | 5'- d (CTT CAT TTT TTC <b>T</b> TTC) | 4503.792              | 4504.034 | 44.8     | -0.1         | 45.1     | +0.5         |
| AON 23 |   | 5'- d (CTT CAT TTT <b>T</b> TTC TTC) | 4503.792              | 4503.769 | 43.9     | -1.0         | 45.2     | +0.6         |
| AON 24 |   | 5'- d (CTT CAT <b>T</b> TT TTC TTC)  | 4503.792              | 4503.940 | 42.7     | -2.2         | 45.2     | +0.6         |
| AON 25 |   | 5'- d (CTT <b>CAT</b> TTT TTC TTC)   | 4503.792              | 4503.769 | 43.1     | -1.8         | 46.2     | +1.6         |
|        |   |                                      |                       |          |          |              |          |              |
| AON 30 |  | 5'- d (CTT CAT TTT TTC <b>T</b> TTC) | 4490.760              | 4491.274 | 46.4     | +1.4         | 48.4     | +3.9         |
| AON 31 |   | 5'- d (CTT CAT TTT <b>T</b> TTC TTC) | 4490.760              | 4491.817 | 44.3     | -0.7         | 47.8     | +3.3         |
| AON 32 |   | 5'- d (CTT CAT <b>T</b> TT TTC TTC)  | 4490.760              | 4637.500 | 43.3     | -1.7         | 47.9     | +3.4         |
| AON 33 |   | 5'- d (CTT <b>CAT</b> TTT TTC TTC)   | 4490.760              | 4637.139 | 44.2     | -0.8         | 48.1     | +3.6         |

<sup>α</sup>A = native adeninyl, C = cytosinyl, T = thyminyl, '**T**' indicates the modified thymidine monomer with the specified structure.  $T_m$  values measured as the maximum of the first derivative of the melting curve ( $A_{260\text{nm}}$  vs temperature) in medium salt buffer (60 mM tris-HCl at pH 7.5, 60 mM KCl, 0.8 mM MgCl<sub>2</sub>) with temperature range 20 to 70°C using 1 μM concentrations of two complementary strands. The value of  $T_m$  given is the average of two or three independent measurements.  $\Delta T_m$  values were obtained by comparing the  $T_m$  values of modified AONs **2-25** and AONs **30-33** with that of native AON **1**.