



**Figure S22.** Autoradiogram of 20% denaturing PAGE, showing the cleavage kinetics of 5'-<sup>32</sup>P-labelled target RNA (**14**) by RNase H1 in the native AON (**1**)/RNA (**14**), 15-DPPz AON (**7**) /RNA (**14**), 15-3T-DPPZ (**8**) /RNA (**14**), 15-3T-Cholest AON (**10**) /RNA (**14**) and 15-2C-Cholest AON (**11**) /RNA (**14**) hybrid duplexes. PDE-Ladder: snake venom PDE ladder. Conditions of cleavage reaction: RNA (0.61  $\mu$ M) and AONs (5  $\mu$ M) in buffer, containing 20 mM Tris-HCl (pH 8.0), 20 mM KCl, 10 mM MgCl<sub>2</sub> and 0.1 mM DTT at 21 °C, 0.12 U of RNase H. Total reaction volume is 30  $\mu$ l. (See Materials and Methods section for full experimental details.)