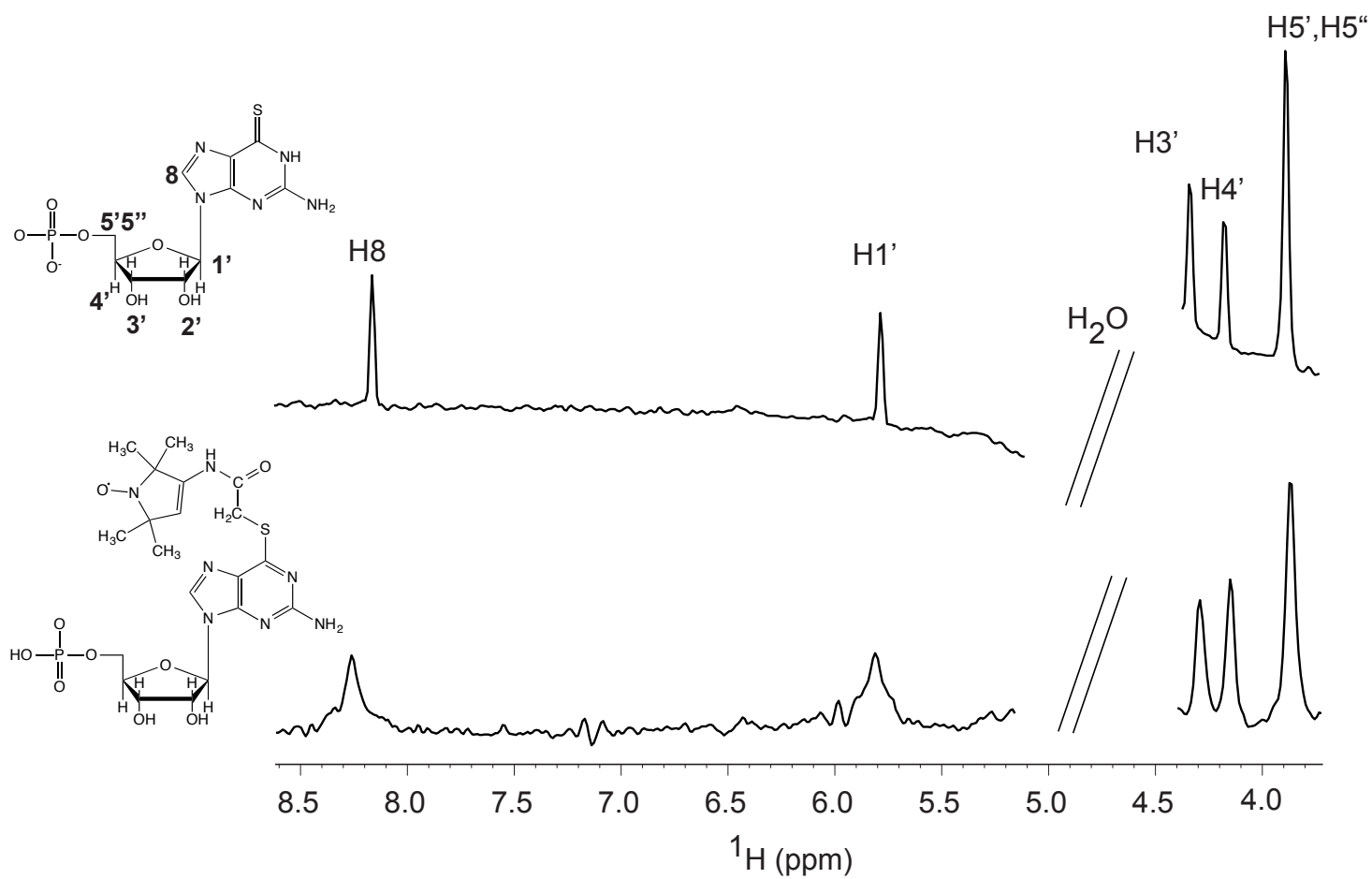


Supplementary Figure 1: Reaction between 6-thioguanosine-5'-O-monophosphate (6-T-GMP) and 3-(2-Iodoacetamido)-proxyl (proxyl)

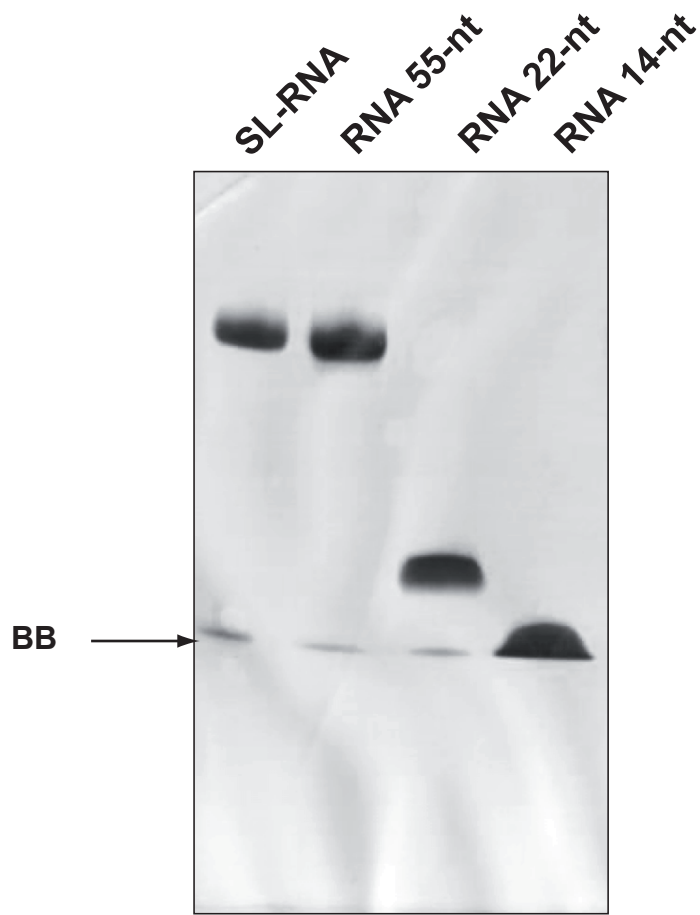
One-dimensional ^1H spectra of 6TGMP (top) and proxyl coupled to 6TGMP (bottom), recorded at 20°C.

Supplementary Figure 2: Integrity of the RNA upon labeling reaction

Denaturing 20 % polyacrylamide gel. Spin-labeled RNA and RNAs controls were loaded in the NMR buffer: lane 1, Spin-Labeled RNA (SL-RNA); lane 2, 55-nt RNA; lane 3, 22-nt RNA; lane 4: 14-nt RNA. The bromophenol blue band is indicated with “BB”. No degradation was observed upon labeling.



Supplementary Figure 1



Supplementary Figure 2

Supporting Table 1: Fragment Ions of RNase A-generated oligonucleotide 5'-A₂₃G₂₄SLG₂₅A₂₆C₂₇p-3'

Ions series	<i>y calc.</i>	y found	<i>x calc.</i>	x found	<i>w calc.</i>	w found
C27	322.2	321.7	384.1	383.7	402.2	401.7
A26	651.4	650.9	713.4	712.9	731.4	730.9
G25	996.6	996.1	1058.6	1058.1	1076.6	1076.2
G24 _{6Tproxyl}	1554.9	1554.5	1616.9	1616.8	1634.9	1634.6
A23	1884.1	1883.7				