



Supplementary Figure S2

In vitro single-stranded DNA deaminase activity of A3Bctd-QM Δ L3 and A3Bctd-QM Δ L3-GL7 (A3B-GL7), tested on their optimal substrates (RSH5194 and RSH6700, respectively) in the presence of **A**) 2-hydroxypyrimidine from 0 to 400 mM or **B**) 0-400 mM of additional sodium chloride (150-550 mM total). **C**) In parallel with the UDG treatment of the A3B treated samples, a uracil-containing oligo (RSH4782) was treated with UDG in the presence of either 2-hydroxypyrimidine or sodium chloride to control for the possibility that 2-hydroxypyrimidine or high salt concentrations inhibit UDG. The results show that under the conditions used, high salt did not inhibit UDG but high concentrations of 2-hydroxypyrimidine did inhibit UDG. On each gel, the outside lanes are loaded with the immediately adjacent sample to reduce edge effects when running the gels.

RSH5194: 5' -ATTATTATTATTCAAATGGATTTATTTATTTATTTATTTATTT-fluorescein

RSH6700: 5' -ATTATTATTATCCCAATGGATTTATTTATTTATTTATTTATTT-fluorescein

RSH4782: 5' -ATTATTATTATTUTAATGGATTTATTTATTTATTTATTTATTT-fluorescein