## SUPPLIMENTAL DATA

<u>Sup. Fig. 1.</u> The diminished RNase H activity of N348I is amplified under multipleturnover. On the PPT sequence \*17r8d-57d, in the absence of nucleotide, subsequent RNase H activity increases over time in the presence of 6mM Mg<sup>2+</sup>. N348I exhibits the least overall activity where RNase H activity from 6 seconds to 10 minutes follows the order WT > Y181C > K103N > N348I.

	WT	N348I	K103N	Y181C
	Time (mins)	Time (mins)	Time (mins) 🔥	Time (mins)
	0.1 0.25 0.50 0.75 1 1 10 - Mg	0.1 0.25 0.50 0.75 1 2 2 5 - Ma	0.1 0.25 0.50 0.75 1 1 10 - Mg	0.1 0.25 0.50 0.75 1 1 10 - Mg
17r8d				100
		and were store over		10 Mill 10 Ad 40 Ad 41 A
17r				
10r 15r				
14r				
13r				