Alternative RNA degradation pathways by the exonuclease Pop2p from *Saccharomyces Cerevisiae*

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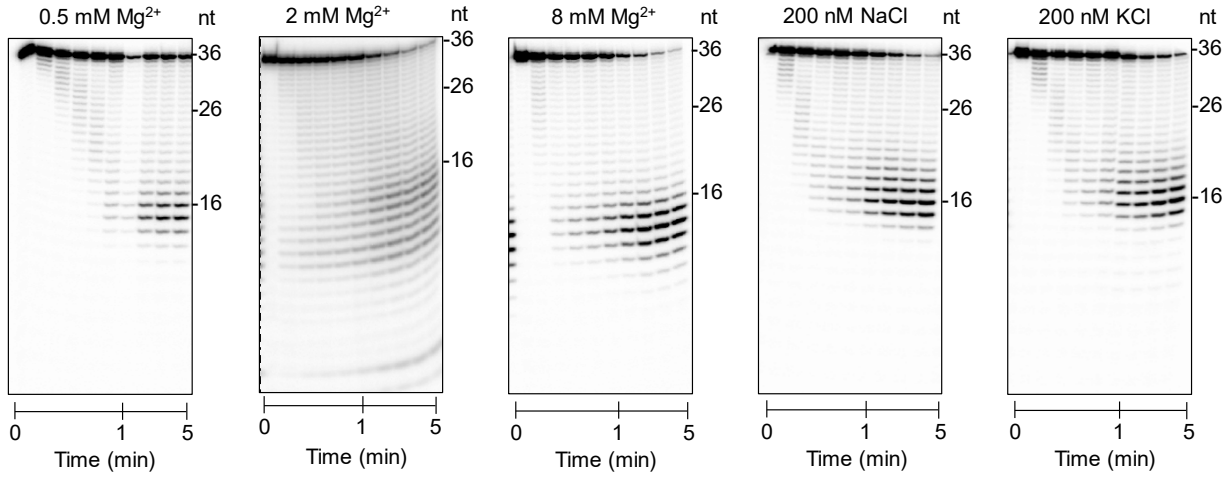
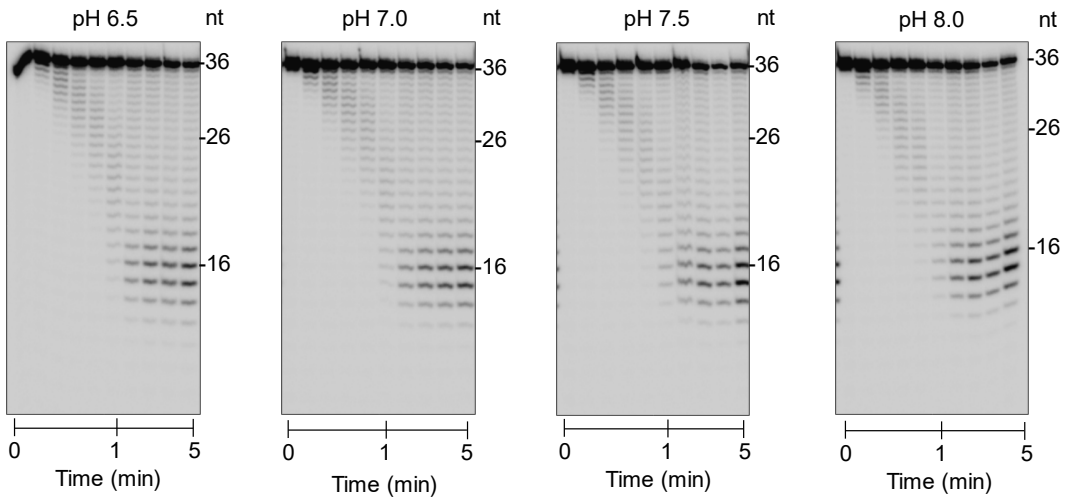
Supplementary Materials

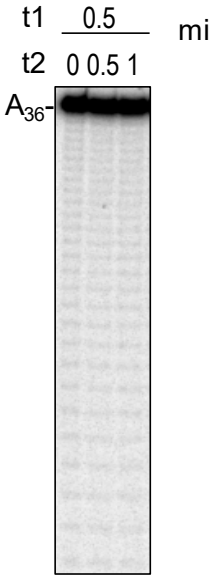
Supplementary Figures S1 – S4



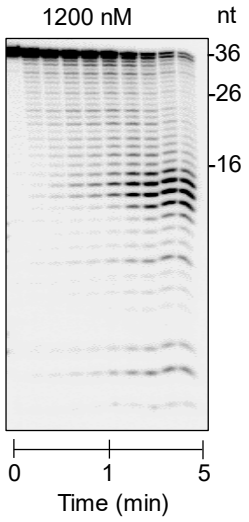
Supplementary Figure S1. RNA degradation by Pop2p under different reaction conditions. Representative PAGE for Pop2p exonuclease reactions with A_{36} at indicated reaction conditions. Aside from the variations in the noted salt concentrations, reaction conditions were as described in the Materials and Methods section. (Pop2p: 1,200 nM, A_{36}: 1 nM, aliquots were removed at 10 s, 20 s, 30 s, 40 s, 1, 2, 3, 4 and 5 min). Numbers on the right indicate the RNA length (in nt).



Supplementary Figure S2. RNA degradation by Pop2p at different pH. Representative PAGE for exonuclease reactions of Pop2p (1,200 nM) with A_{36} (1 nM) at different pH (as indicated). Aside from the variations in the noted salt concentrations, reaction conditions were as described in the Materials and Methods section. Aliquots were removed at 10 s, 20 s, 30 s, 40 s, 1, 2, 3, 4 and 5 min.



Supplementary Figure S3. Control reaction of Pop2p with scavenger RNA. Representative PAGE for a control reaction of Pop2p (1200 nM) with scavenger RNA (5 μM) before addition of labeled A_{36} (1 nM). (t_1: incubation time before addition of labeled substrate. t_2: incubation time after addition of labeled substrate).



Supplementary Figure S4. Degradation of an AU-rich substrate by Pop2p. Representative PAGE for reaction of Pop2p (1,200 nM) with an AU rich substrate (5'-UUAUUUAUUAUUUAUUUAUUUAUUAUUUAUUUAUUA, 1 nM). Reaction conditions were as described in the Materials and Methods section. Aliquots were removed at 10 s, 20 s, 30 s, 40 s, 1, 2, 3, 4 and 5 min.