

## Supplementary Information Gertsman et al.

Suppl. Fig. 1. **Native agarose gel showing both E344Q and E344A mutants before and after high speed centrifugation.** The upper bands represent expanded capsids and the lower bands represent P-II. Very little E344Q has expanded post centrifugation while E344A shows a significant fraction of expanded particles.

Suppl. Fig. 2. **Resolving the shoulder of the P-II endotherm.** (A) The heating during the initial DSC scan (green trace) was stopped at 72° C and cooled to room temperature. The cooled sample was scanned again by DSC (red trace) and also run on a native agarose gel (B). The sample no longer showed a shoulder in its endotherm, and was shown to run identically as P-II by native agarose gel, proving that the small thermal event was not from a premature expansion event.