Supplementary Video S1 BacFlashes in BW25113 cells in M9 minimal medium containing 20 mM ammonium. Scale bar:  $2 \mu m$ .

**Supplementary Video S2** BacFlash in filamentous BW25113 cells in ammonium-free M9 minimal medium. Scale bar:  $5 \mu m$ .

Supplementary Video S3 BacFlashes in BW25113 cells in ammonium-free M9 minimal medium. Scale bar:  $2 \mu m$ .