

DNA interrogation by the CRISPR RNA-guided endonuclease Cas9

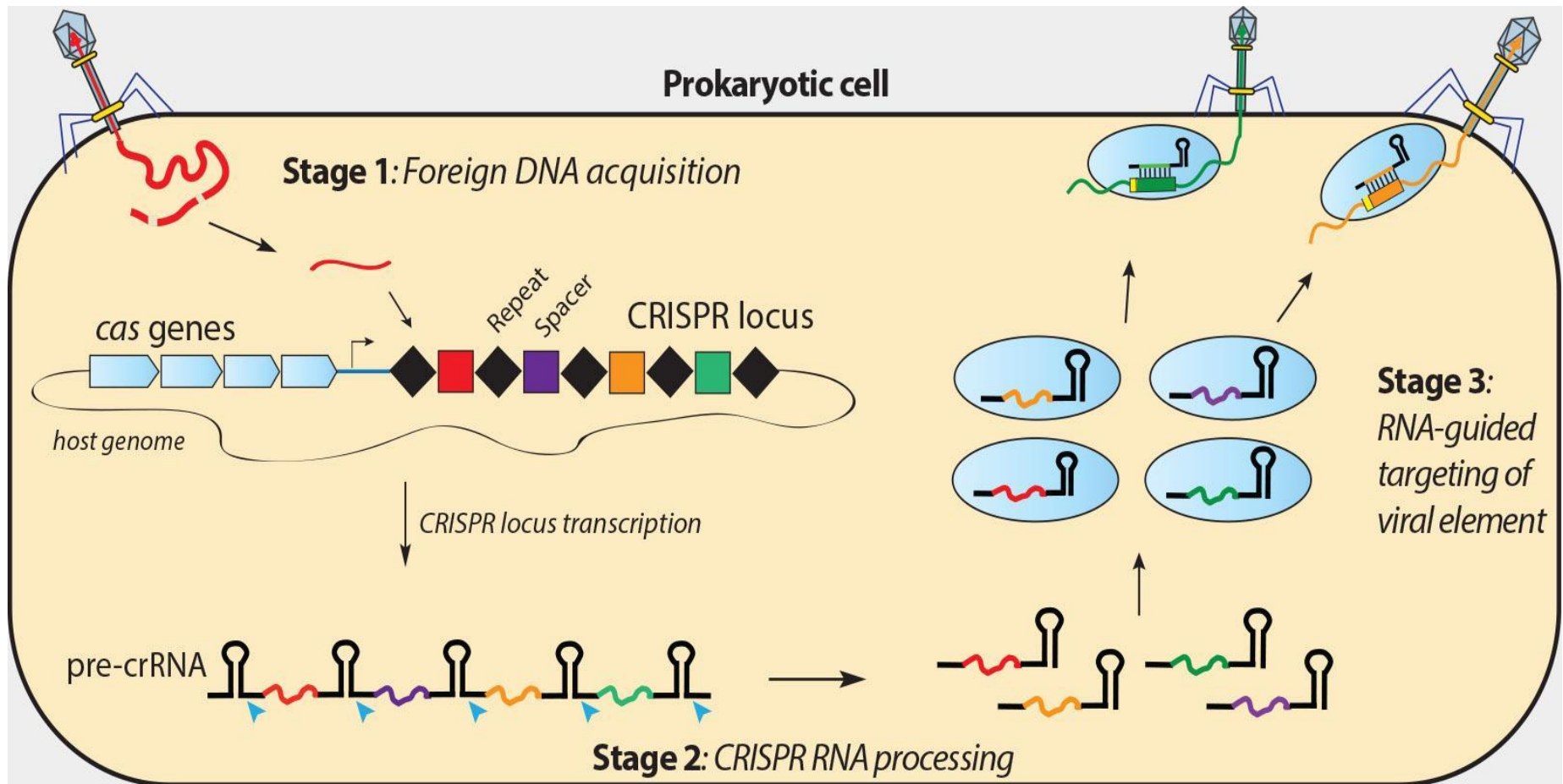
Samuel H. Sternberg, Sy Redding, Martin Jinek, Eric C. Greene &
Jennifer A. Doudna

2014

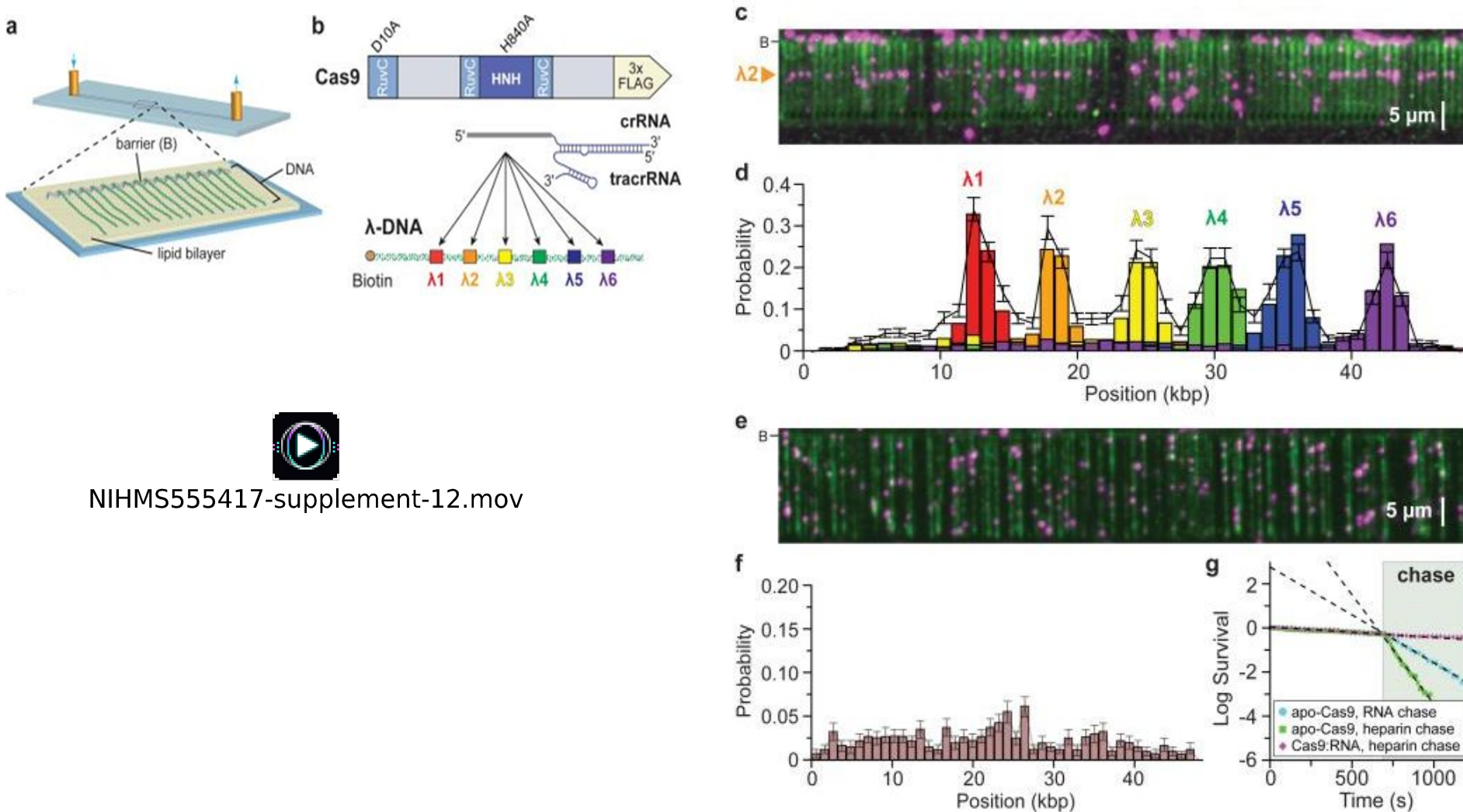
Martin Jinek, Jennifer A. Doudna
Berkeley, California



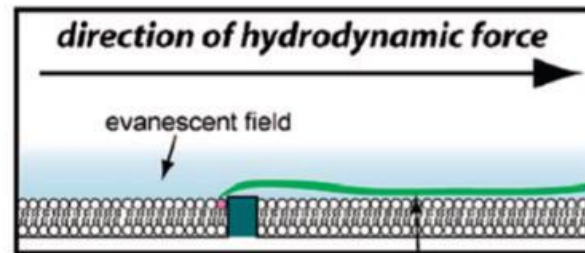
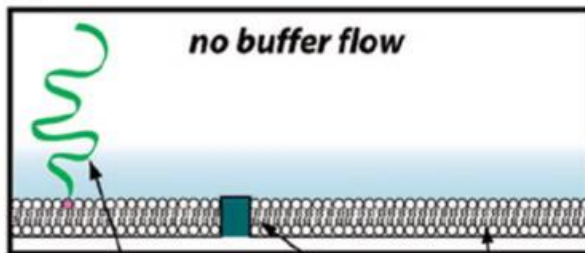
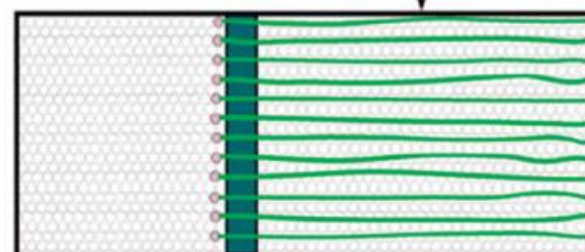
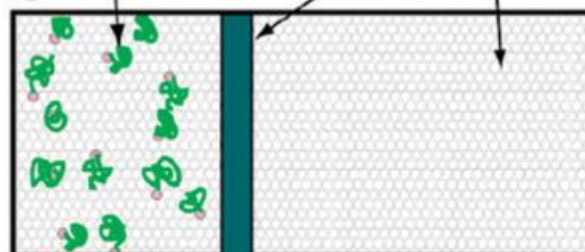
CRISPR/Cas9 bacterial immune system



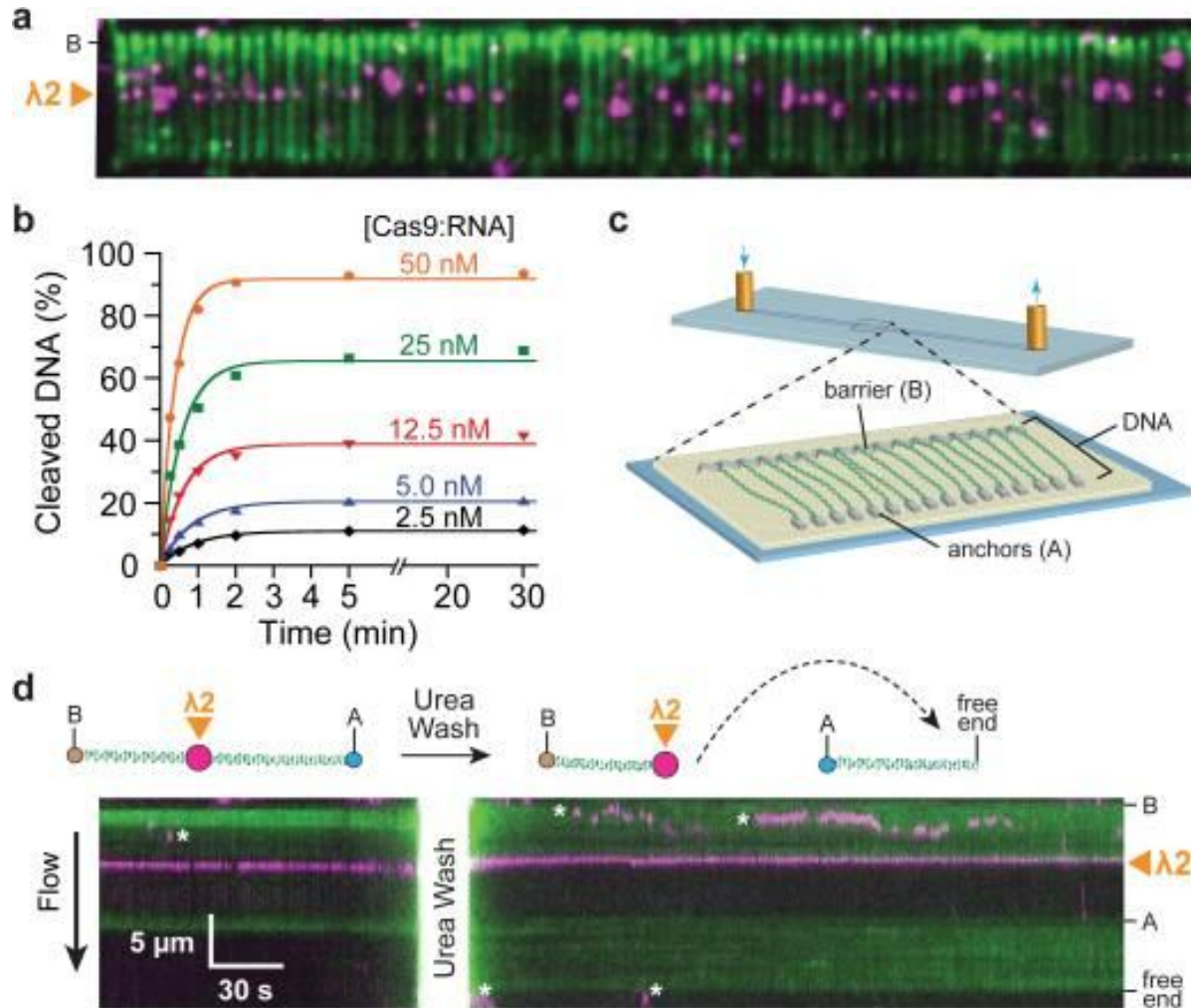
1. Single-molecule visualization of Cas9



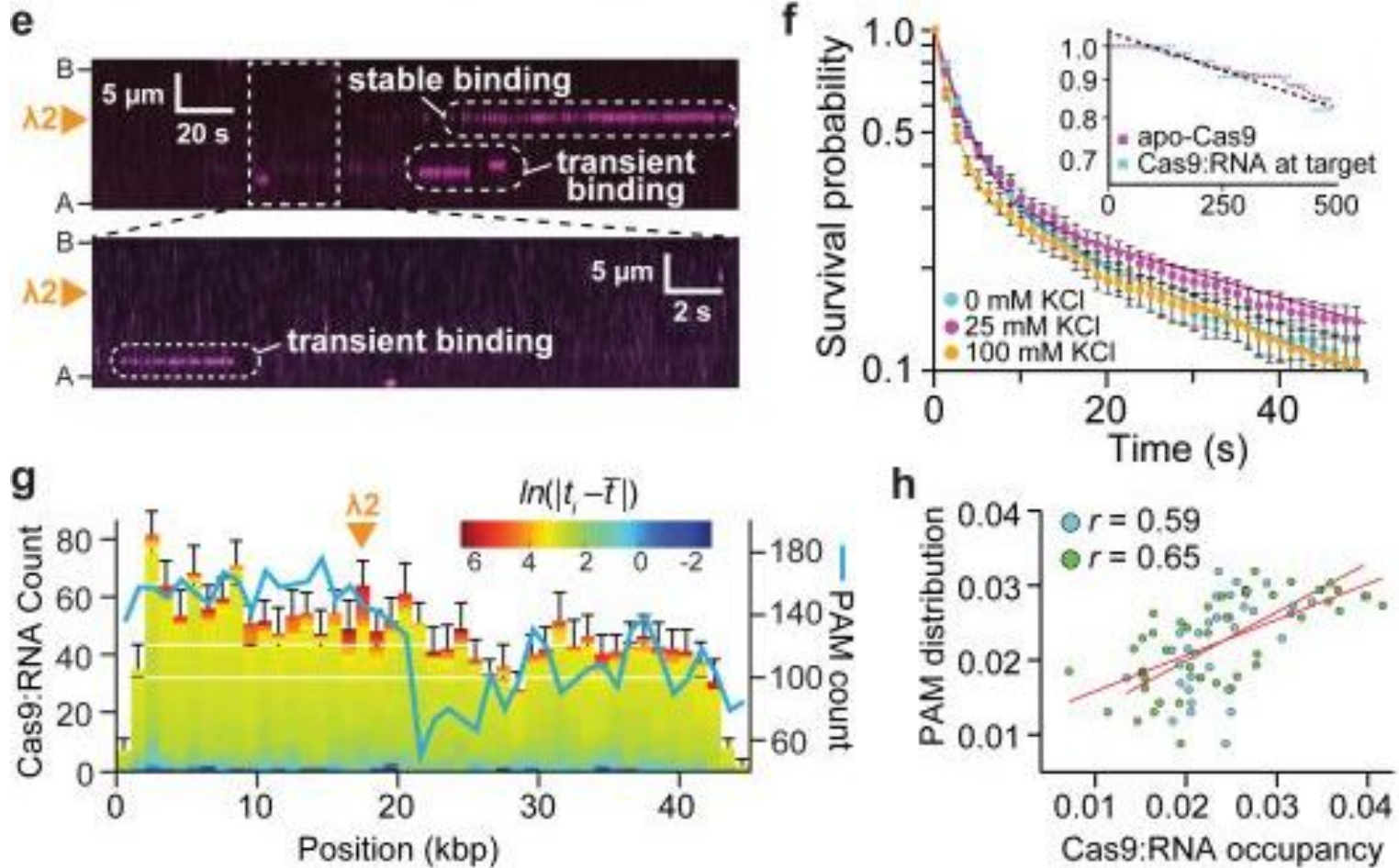
NIHMS555417-supplement-12.mov

B**C**

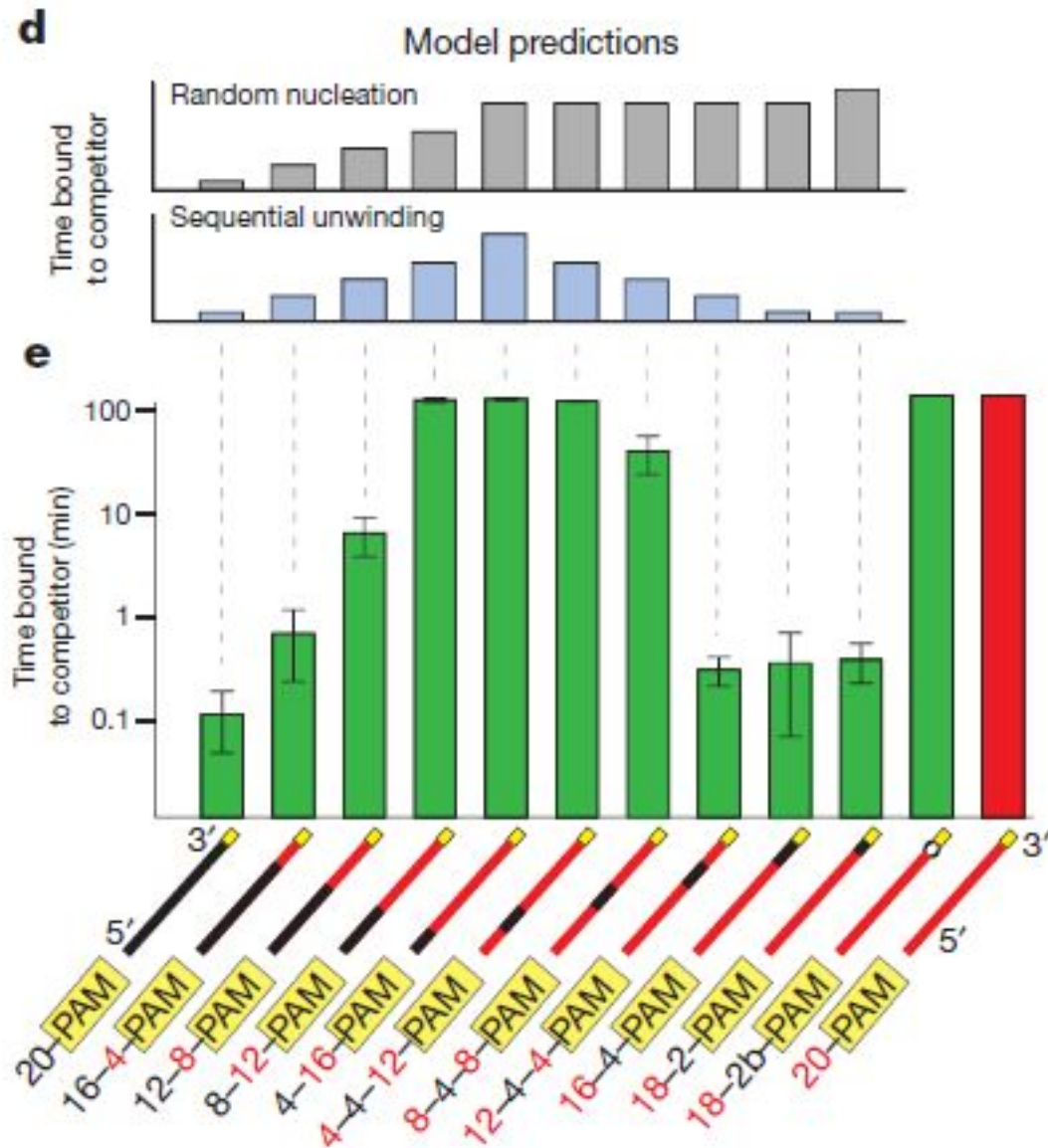
1. Single-molecule visualization of Cas9



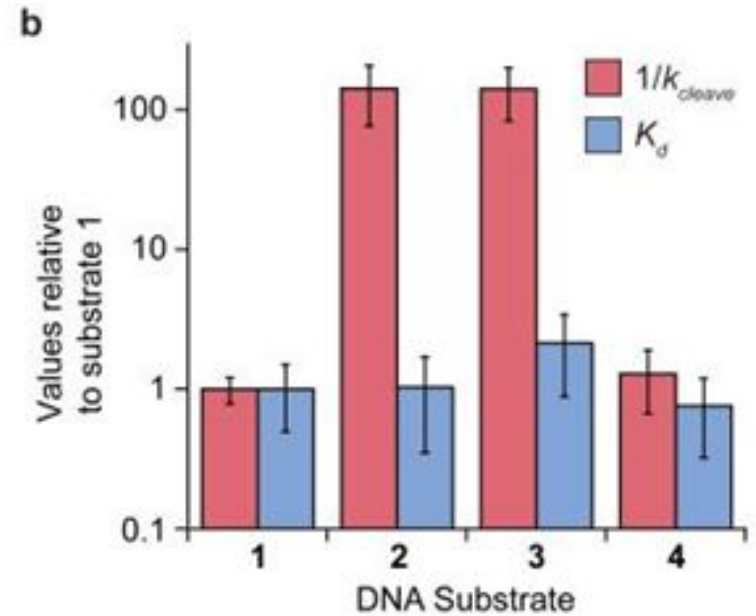
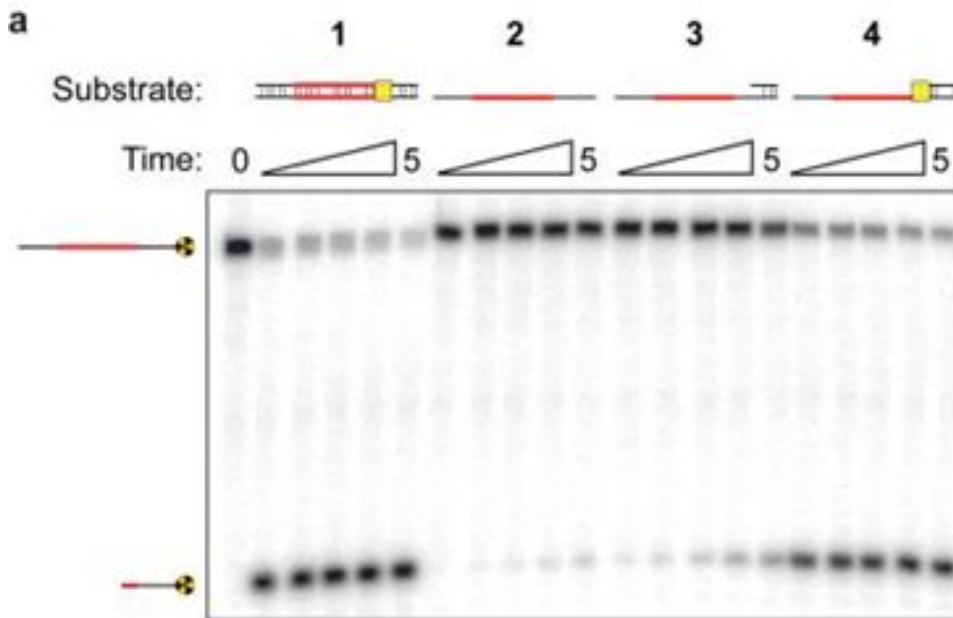
2. Cas9-RNA finds targets by 3D diffusion



4. Mechanism of RNA-DNA heteroduplex formation



5. The PAM triggers Cas9 nuclease activity



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