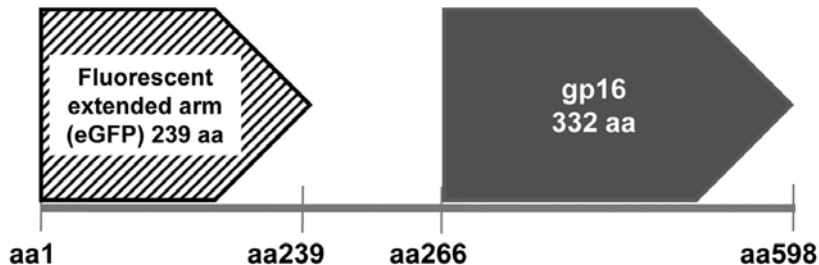


Engineering of Fluorescent Energy Conversion Arm of Phi29 DNA Packaging Motor for Single Molecule Studies

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Supporting Information 1

Amino acid sequence map of the eGFP-gp16 showing that the N-terminus of the original 332 amino acids of native gp16 (underlined starting with MDKSLF) was extended with 266 amino acids, as a result 239 amino acid coding for fluorescent eGFP (italic starting with MVSKGE) and a His-tag (underlined italic six H) along with linker sequences.



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MVSKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTCLKF
ICTTGKLPVPWPTLVTTLTYGVCFSRYPDHMKQHDFKSPAMPEGYV
QERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKL
EYNYNSHNVYIMADKQKNGIKVNFKIRHNIEDGSVQLADHYQQNTPIG
DGPVLLPDNHYLSTQSALSNDPNEKRDHMLLEFVTAAGITLGMDEL
YKGSQSGHMHHHHHHSSGGTGGGSGIEGRMDKSLF.....FRKMRIQ

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