

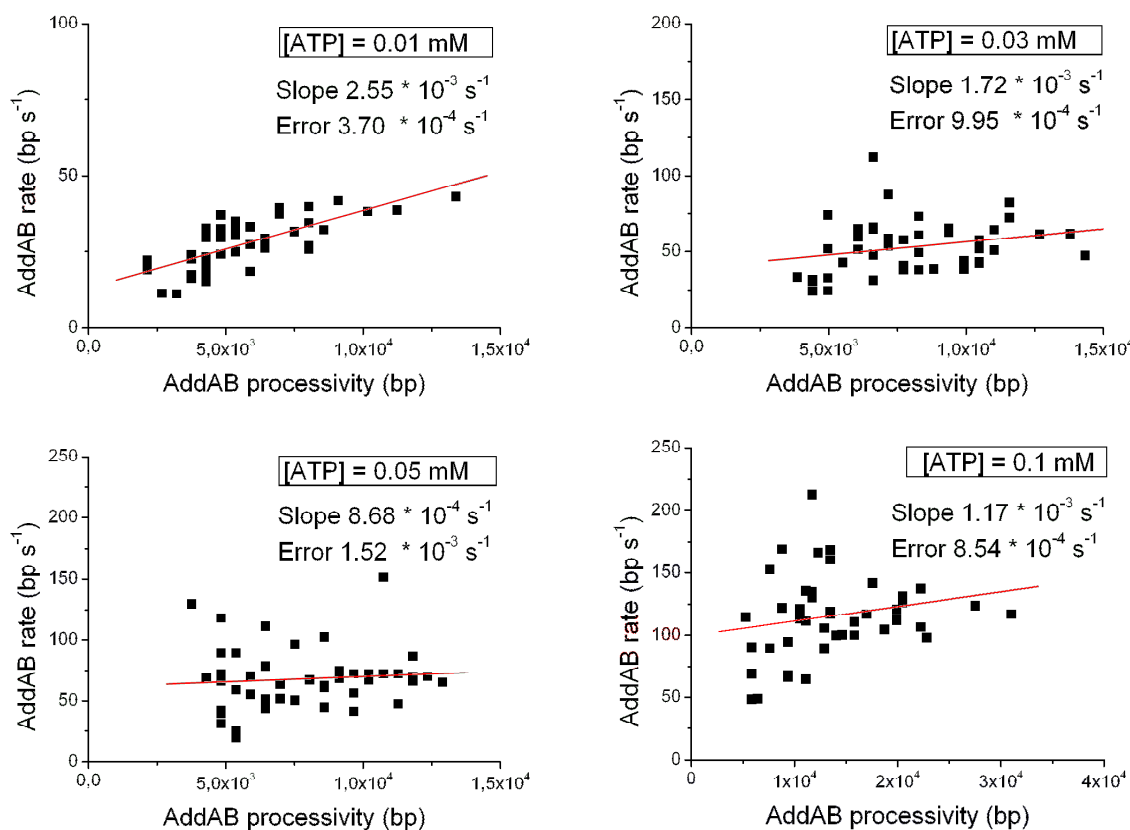
# Single molecule imaging of *Bacteroides fragilis* AddAB reveals the highly processive translocation of a single motor helicase.

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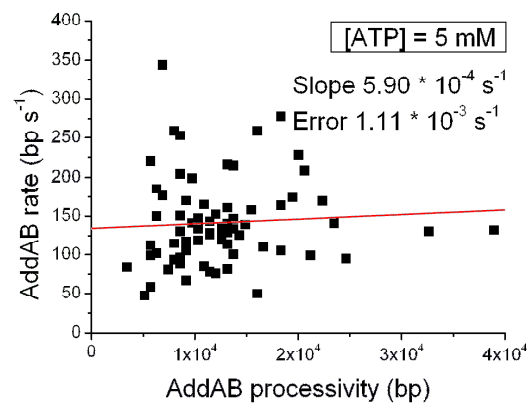
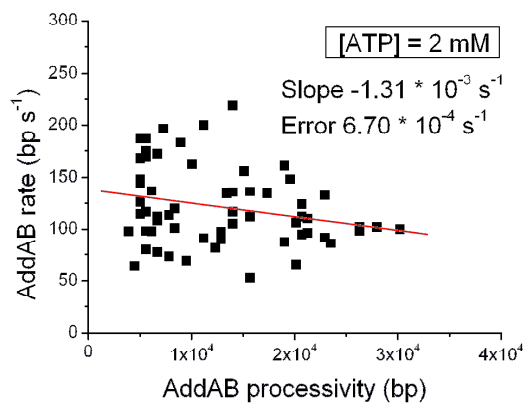
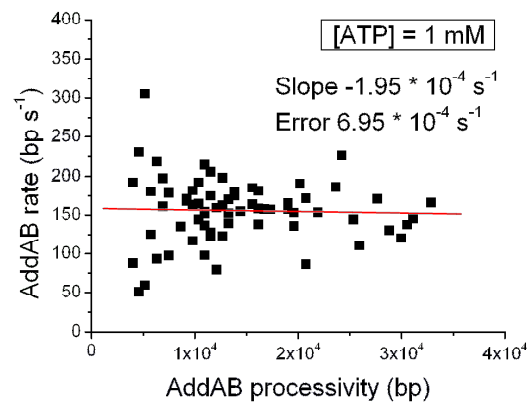
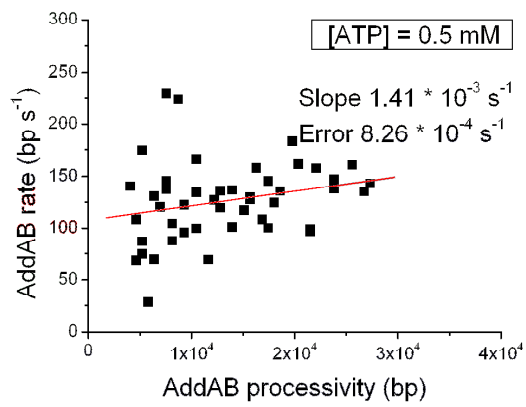
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## Supplementary figures

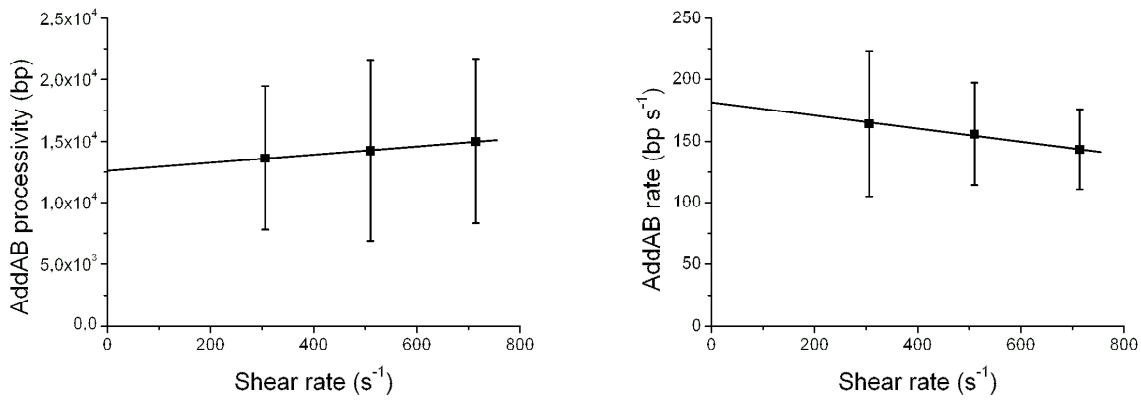
**Supplementary figure S1** Correlation of AddAB rate with AddAB processivity for 0.01, 0.03, 0.05, 0.1, 0.5, 1, 2 and 5 mM ATP. These data indicate there is a positive linear correlation between AddAB rate and AddAB processivity at ATP concentrations of 0.01, 0.03, 0.1 and 0.5 mM.



## Supplementary figure S1 continued



**Supplementary Figure S2:** Shear rate dependence of AddAB processivity and rate. At zero shear rate a hypothetical rate and processivity of  $12,600 \pm 11,260$  bp and  $182 \pm 94$  bp s<sup>-1</sup> are reached.



**Supplementary Figure S3:** YOYO-1 staining ratio dependence (given in dye molecules per DNA base pair) of AddAB processivity and rate.

