Supplementary Movie Information

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

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Movie 1
This movie shows a single stretched molecule of fluorescently-labelled lambda DNA, attached to a surface by its left hand end, being digested from its right hand end by the processive action of a single molecule of AddAB.

Movie 2
This movie shows a single stretched molecule of fluorescently-labelled lambda DNA, attached to a surface by its left hand end. At 4 s its right hand end becomes stuck on the surface. At 13 s, the left hand end becomes transiently unstuck and reattaches at a different location on the surface. This results in the formation of a looped structure which becomes two linear fragments upon photodamage at 14 s. A molecule of AddAB then attaches itself to the uppermost linear fragment and digests the DNA.

Movie 3
This movie shows a single stretched molecule of fluorescently-labelled lambda DNA, attached to a surface by its left hand end. AddAB is present but no ATP has been added and no digestion of the DNA is observed.