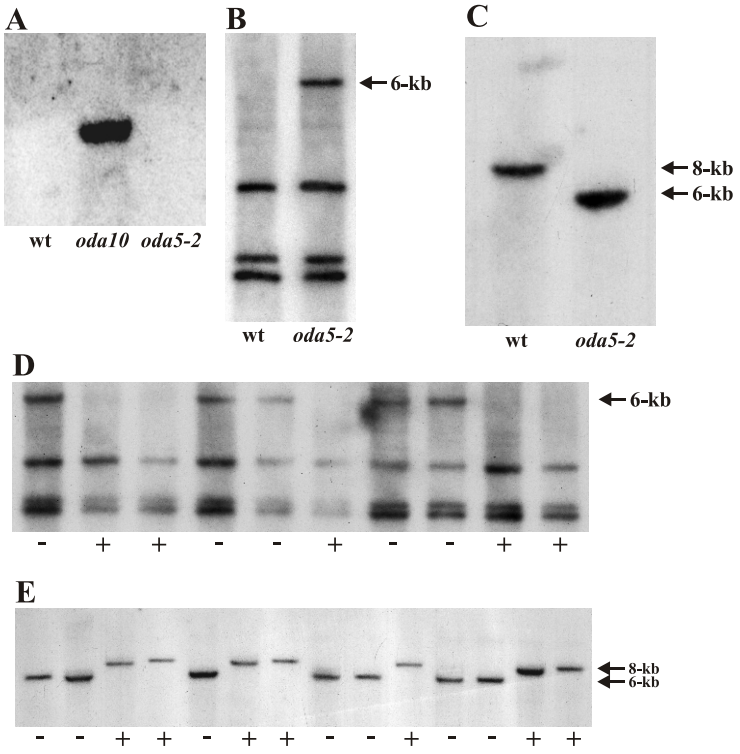

Figure S1: Identification of endogenous, genomic DNA sequence at the site of the *oda5-2* mutation. (A) Southern blot of genomic DNA isolated from a wild-type strain, an *oda10-2* insertional mutant (Koutoulis et al., 1997) and the *oda5-2* insertional mutant probed with pUC119. The *oda5-2* DNA lacks hybridizing bands, indicating the vector sequences were not maintained in the insertion. As expected, wild-type DNA does not contain any hybridizing bands, whereas *oda10-2*, which is a pUC-positive insertional mutant, does contain DNA that hybridizes with the vector probe. (B) Southern blot utilizing a probe to the 3'-end of the *Chlamydomonas NIT1* gene identifies a 6-kb genomic SacII fragment (arrow) in *oda5-2* but not wild-type DNA. (C) Southern blot using a probe, 36.1, to endogenous sequence derived from the mutant RFLP fragment identifies the 6-kb SacII genomic fragment in *oda5-2*, whereas it hybridizes to an 8-kb genomic fragment in wild-type DNA. (D) and (E) *Oda5-2* was crossed to a wild-type strain and 10 of the resulting progeny were analyzed for motility and presence of the RFLPs identified by *NIT1* (D) and 36.1 (E). Both RFLPs segregate with the Oda- motility phenotype (+ designates wild-type and - designates Oda- phenotype).