



Figure S3 BER1 strain mtDNA increases the lifespan of *sesB*¹ flies. Lifespan curves for flies of the genotypes indicated. For both sexes, the curves for *wol* (BER1); *sesB*¹ and *Cwol* (BER1) ; *sesB*¹ (median survival of 17, 19 d, respectively, for males, 31 and 26 d for females) were significantly different from *sesB*¹ flies of the same sex (median survival 10 d for males, 15 d for females, $p < 0.0001$, log rank test, in all cases). Since the flies are backcrossed to the same nuclear background, the differences are strictly attributable to the cytoplasmic genotype. BER1 mtDNA thus mitigates the age-related degeneration of *sesB*¹ adults, even though it does not modify the *sesB*¹ developmental phenotype.