Fig. 2 Effect of mutant and wildtype DAF-16a::GFP proteins on lifespan. *P* values were calculated for individual experiments, each consisting of control and experimental animals examined at the same time. We show the cumulative statistics because we observed that the strains behaved similarly in different experiments (we observed no statistically-significant differences). n, total number of animals observed (the number of independent experiments performed is given in parentheses); *m*, mean lifespan ± SEM; *P*, p values. *a*, N2, n = 348 (5), *m* = 19.4 ± 0.3; *daf-2(e1370)*, n = 140 (2), *m* = 45.8 ± 1.5, *P* < 0.0001 vs. N2; *daf-16(mu86); daf-2(e1370)*, n = 140 (2), *m* = 14.8 ± 0.4, P < 0.0001 vs *daf-2(e1370)* or N2; *daf-16(mu86); daf-2(e1370); muIs61,* n = 37 (1), *m* = 44.1 ± 3.6, *P* < 0.0001 vs. *daf-16(mu86); daf-2(e1370)* or N2. *b*, *daf-16 (mu86); daf-2(e1370); muEx108*, n = 49 (1), *m* = 40.1 ± 3.3, *P* = 0.075 vs. *daf-2(e1370)*, *P* < 0.0001 vs. *daf-16 (mu86); daf-2(e1370)* or N2; *daf-16 (mu86); daf-2(e1370); muEx110*, n = 70 (1), *m* = 38.5 ± 2.4, *P* = 0.018 vs. *daf-2(e1370)*; *P* < 0.0001 vs. *daf-16 (mu86); daf-2(e1370)* or N2. *c*, N2 carrying *muEx167*, n = 49 (1), *m* = 20.8 ± 0.9, *P* = 0.047 vs. N2; N2 carrying *muEx107*, n = 50 (1), *m* = 21.2 ± 0.8, *P* = 0.020 vs. N2; N2 carrying *pRF4* alone, n = 190 (3), *m* = 18.4 ± 0.4, *P* = 0.286 vs. N2. *d*, N2 carrying *muEx53*, n = 60 (1), *m* = 18.7 ± 0.9, *P* = 0.83 vs. N2; N2 carrying *muEx58*, n = 61 (1), *m* = 21.2 ± 0.9, *P* = 0.0006 vs. N2; N2 carrying *muEx59*, n = 67 (1), *m* = 22.1 ± 0.9, *P* < 0.0001 vs. N2; n = 188 (3), *m* = 17.0 ± 0.5, *P* = 0.0035 vs. N2. *e*, *daf-16(mu86)* #1, n = 140 (2), *m* = 15.1 ± 0.3, *P* < 0.0001 vs. N2; *daf-16(mu86)#2*, n = 140 (2), *m* = 14.5 ± 0.3, *P* < 0.0001 vs. N2, *P* = 0.36 vs. *daf-16(mu86)* #1; *daf-16(mu86); daf-2(e1370)*, n = 140 (2), *m* = 14.8 ± 0.4, *P* < 0.0001 vs. N2, *P* = 0.61 vs *daf-16(mu86)* #1, *P* = 0.54 vs. *daf-16(mu86)* #2. *f*. *daf-*

16(mu86), n = 140 (2), *m* = 15.1 ± 0.3, *P* < 0.0001 vs. N2; *daf-16(mu86); muEx116*, n = 50 (1), *m* = 16.6 ± 0.8, *P* = 0.038 vs. *daf-16(mu86)*, *P* = 0.0002 vs. N2; *daf-16(mu86); muEx160*, n = 82 (1), *m* = 20.8 ± 0.8, *P* < 0.0001 vs. *daf-16(mu86)*, *P* = 0.051 vs. N2; *daf-16(mu86); daf-2(e1370); muEx158*, n = 7 0 (1), *m* = 31.7 ± 1.9, *P* < 0.0001 vs. N2; *daf-16(mu86); daf-2(e1370); muEx159*, n = 65 (1), *m* = 34.5 ± 2.3, *P* < 0.0001 vs. N2. **g**, *daf-16(mu86); muEx151*, n = 90 (1), *m* = 17.9 ± 0.9, *P* = 0.0014 vs. *daf-16(mu86)*, *P* = 0.32 vs. N2; *daf-16(mu86); muEx152*, n = 100 (1), *m* = 21.2 ± 1.0, *P* < 0.0001 vs. *daf-16(mu86)*, *P* = 0.026 vs. N2; *daf-16(mu86); muEx154,* n = 60 (1), *m* = 22.7 ± 1.3, *P* < 0.0001 vs. *daf-16 (mu86);* *P* = 0.0005 vs. N2; *daf-16(mu86); daf-2(e1370); muEx151,* n = 60 (1), *m* = 35.4 ± 2.8, *P* < 0.0001 vs. N2; *daf-16(mu86); daf-2(e1370); muEx154, m* = 34.9 ± 2.8, *P* < 0.0001 vs.N2.