Table S1. Dauer entry phenotypes of wild-type and insulin-deficient worms

Strain/treatment	Mean fraction of dauers ± s.e.m.	Total no. of animals observed (no. of trials)	*P*-value against control*	*P*-value against specified groups
25°C				
Wild type*	0.00±0.00	1005 (10)		
ins-1(nr2091)	0.00±0.00	368 (4)	n.s.	
ins-6(tm2416)	0.00±0.00	566 (6)	n.s.	
daf-28(tm2308)	0.02±0.01	705 (7)	0.004	
ins-6; *ins-1*	0.00±0.00	277 (3)	n.s.	
ins-1; *daf-28*	0.04±0.01	494 (5)	0.004	n.s.†
ins-6; *daf-28*	0.36±0.04	1061 (10)	<0.0001	0.0006†
ins-6; *ins-1*; *daf-28*	0.30±0.06	392 (3)	0.002	n.s.‡
20°C				
Wild type	0.00±0.00	608 (6)	n.s.	
*daf-2(e1368)**	0.00±0.00	595 (6)		
daf-2; *daf-28*	0.76±0.08	444 (4)	0.002	
daf-2; *ins-1*; *daf-28*	0.44±0.09	621 (6)	0.004	0.06§
ins-6; *daf-2*; *daf-28*	0.92±0.05	437 (4)	0.004	n.s.§
ins-6; *daf-2*; *ins-1*; *daf-28*	0.93±0.04	419 (4)	0.004	n.s.¶
27°C				
Wild type*	0.01± 0.01	1262 (13)		
ins-1	0.02±0.01	730 (8)	n.s.	
ins-6	0.06±0.02	849 (9)	0.007	
daf-28	0.74±0.04	873 (9)	<0.0001	
ins-6; *ins-1*	0.11±0.05	353 (4)	0.04	
ins-1; *daf-28*	0.79±0.07	605 (6)	0.0003	n.s.†
ins-6; *daf-28*	1.00±0.00	903 (9)	<0.0001	0.0001†
ins-6; *ins-1*; *daf-28*	1.00±0.00	328 (3)	0.004	n.s.‡
22.5°C				
Wild type	0.00±0.00	488 (5)	0.009	
*daf-2**	0.29±0.07	487 (5)		
daf-2; *ins-1*	0.10±0.03	476 (5)	0.03	
ins-6; *daf-2*	0.36±0.08	487 (5)	n.s.	
ins-6; *daf-2*; *ins-1*	0.14±0.03	487 (5)	0.08	0.03**
daf-2; *daf-28*	0.99±0.00	509 (5)	0.009	
daf-2; *ins-1*; *daf-28*	0.97±0.01	510 (5)	0.009	0.05§
ins-6; *daf-2*; *daf-28*	1.00±0.00	503 (5)	0.005	
ins-6; *daf-2*; *ins-1*; *daf-28*	1.00±0.00	299 (3)	0.02	n.s.¶
25°C				
Wild type	0.00±0.00	486 (5)		
*daf-16**	0.00±0.00	501 (5)	n.s.	
ins-6; *daf-28*	0.21±0.05	504 (5)	0.005	0.005††
daf-16; *ins-6*; *daf-28*	0.01±0.01	491 (5)	n.s.	0.008‡
ins-6; *ins-1*; *daf-28*	0.25±0.06	426 (5)	0.005	n.s.‡
daf-16; *ins-6*; *ins-1*; *daf-28*	0.00±0.00	458 (5)	n.s.	0.005‡‡
***ins-6* rescues**				
25°C				
ofm-1p::gfp (25 ng)				
wild type; *jxEx18**	0.00±0.00	594 (5)		
wild type; *jxEx21**	0.00±0.00	477 (5)		
wild type; *jxEx22**	0.00±0.00	477 (5)		
daf-28; *jxEx18*	0.03±0.02	337 (5)	n.s.§§	0.008***
daf-28; *jxEx21*	0.02±0.01	516 (5)	0.05§§	0.009***
daf-28; *jxEx22*	0.01±0.01	414 (4)	n.s.§§	0.01***
ins-6; *daf-28*; *jxEx18*	0.47±0.05	554 (5)	0.005§§	
ins-6; *daf-28*; *jxEx21*	0.31±0.06	559 (5)	0.005§§	
ins-6; *daf-28*; *jxEx22*	0.34±0.06	532 (5)	0.007§§	
Full rescue (low) *ins-6p::ins-6* (2 ng); *ofm-1p::gfp* (25 ng)				

ins-6; *daf-28*; *jxEx27*	0.01±0.00	638 (5)	<0.01[¶¶]	
ins-6; *daf-28*; *jxEx28*	0.01±0.01	682 (5)	<0.01[¶¶]	
ins-6; *daf-28*; *jxEx29*	0.01±0.00	571 (5)	<0.01[¶¶]	
Full rescue (high) *ins-6p::ins-6* (25 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *yxEx163*	0.00±0.00	175 (2)		
ins-6; *daf-28*; *yxEx174*	0.02±0.02	264 (2)		
ins-6; *daf-28*; *yxEx175*	0.01±0.01	215 (2)		
ASI-specific rescue (low) *str-3p::ins-6* (2 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx53*	0.23	47 (1)		
ins-6; *daf-28*; *jxEx54*	0.01	96 (1)		
ins-6; *daf-28*; *jxEx64*	0.10	114 (1)		
ins-6; *daf-28*; *jxEx65*	0.23	105 (1)		
ins-6; *daf-28*; *jxEx66*	0.26	100 (1)		
ASI-specific rescue (high) *str-3p::ins-6* (25 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx50*	0.00±0.00	479 (2)		
ins-6; *daf-28*; *jxEx51*	0.00±0.00	300 (2)		
ins-6; *daf-28*; *jxEx52*	0.01±0.01	264 (2)		
ASJ-specific rescue (low) *trx-1p::ins-6* (2 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx61*	0.01±0.01	378 (2)		
ins-6; *daf-28*; *jxEx62*	0.01±0.01	284 (2)		
ins-6; *daf-28*; *jxEx63*	0.00±0.00	219 (2)		
ASJ-specific rescue (high) *trx-1p::ins-6* (25 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx58*	0.00	134 (1)		
ins-6; *daf-28*; *jxEx59*	0.00±0.00	412 (2)		
ins-6; *daf-28*; *jxEx60*	0.00±0.00	241 (2)		
27°C				
ofm-1p::gfp (25 ng)				
wild type; *jxEx18**	0.01±0.01	320 (3)		
wild type; *jxEx21**	0.01±0.01	312 (3)		
wild type; *jxEx22**	0.01±0.01	345 (3)		
daf-28; *jxEx18*	0.21±0.00	232 (2)	0.08[§§]	0.08***
daf-28; *jxEx21*	0.44±0.04	328 (3)	0.05[§§]	0.05***
daf-28; *jxEx22*	0.40±0.05	333 (3)	0.05[§§]	0.05***
ins-6; *daf-28*; *jxEx18*	0.99±0.00	286 (3)	0.05[§§]	
ins-6; *daf-28*; *jxEx21*	0.98±0.00	292 (3)	0.05[§§]	
ins-6; *daf-28*; *jxEx22*	0.99±0.01	326 (3)	0.05[§§]	
Full rescue (low) *ins-6p::ins-6* (2 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx27*	0.29±0.03	360 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx28*	0.13±0.08	308 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx29*	0.28±0.05	312 (3)	<0.05[¶¶]	
Full rescue (high) *ins-6p::ins-6* (25 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *yxEx163*	0.13±0.02	373 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *yxEx174*	0.10±0.02	357 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *yxEx175*	0.13±0.02	344 (3)	<0.05[¶¶]	
ASI-specific rescue (low) *str-3p::ins-6* (2 ng); *ofm-1p::gfp* (25 ng)				

ins-6; *daf-28*; *jxEx53*	0.82±0.18	70 (2)	n.s.[¶¶]	
ins-6; *daf-28*; *jxEx54*	0.12±0.09	303 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx64*	0.73±0.09	310 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx65*	0.93±0.02	152 (2)	0.08[¶¶]	
ins-6; *daf-28*; *jxEx66*	0.86±0.09	179 (2)	0.08[¶¶]	
ASI-specific rescue (high) *str-3p::ins-6* (25 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx50*	0.14±0.10	339 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx51*	0.16±0.14	350 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx52*	0.15±0.08	372 (3)	<0.05[¶¶]	
ASJ-specific rescue (low) *trx-1p::ins-6* (2 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx61*	0.12±0.10	325 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx62*	0.15±0.11	301 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx63*	0.22±0.14	342 (3)	<0.05[¶¶]	
ASJ-specific rescue (high) *trx-1p::ins-6* (25 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx58*	0.11±0.07	301 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx59*	0.14±0.08	310 (3)	<0.05[¶¶]	
ins-6; *daf-28*; *jxEx60*	0.15±0.09	351 (3)	<0.05[¶¶]	
***daf-28* rescues**				
25°C				
ofm-1p::gfp (25 ng)				
wild type; *jxEx18*	0.00±0.00	315 (3)		
wild type; *jxEx21*	0.00±0.00	320 (3)		
ins-6; *daf-28*; *jxEx18*	0.55±0.04	416 (3)	0.04[§§]	
ins-6; *daf-28*; *jxEx21*	0.30±0.02	347 (3)	0.04[§§]	
Full rescue (low) *daf-28p::daf-28* (2 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx107*	0.27±0.05	391 (3)	0.04[†††]	0.05[‡‡‡] n.s.[§§§]
ins-6; *daf-28*; *jxEx108*	0.40±0.02	344 (3)	0.04[†††]	0.05[‡‡‡,§§§]
Full rescue (high) *daf-28p::daf-28* (25 ng); *ofm-1p::gfp* (25 ng)				
ins-6; *daf-28*; *jxEx103*	0.05±0.02	379 (3)	0.04[†††]	0.05[‡‡‡,§§§]
ins-6; *daf-28*; *jxEx105*	0.15±0.07	352 (2)	0.05[†††]	0.08[‡‡‡,§§§]
27°C				
ofm-1p::gfp (25 ng)				
wild type; *jxEx18*	0.04±0.03	255 (3)		
wild type; *jxEx21*	0.04±0.03	282 (3)		
daf-28; *jxEx18*	0.74±0.08	257 (3)	0.02[§§]	
daf-28; *jxEx21*	0.82±0.08	308 (3)	0.02[§§]	
Full rescue (low) *daf-28p::daf-28* (2 ng); *ofm-1p::gfp* (25 ng)				
daf-28; *jxEx112*	0.67±0.14	353 (3)	0.03[†††]	n.s.[¶¶¶]
daf-28; *jxEx108*	0.68±0.06	352 (3)	0.03[†††]	n.s.[¶¶¶]
Full rescue (high) *daf-28p::daf-28* (25 ng); *ofm-1p::gfp* (25 ng)				
daf-28; *jxEx110*	0.86±0.05	174 (2)	0.06[†††]	n.s.[¶¶¶]
daf-28; *jxEx111*	0.77±0.07	186 (2)	0.06[†††]	n.s.[¶¶¶]
daf-28; *jxEx103*	0.59±0.21	299 (2)	0.06[†††]	n.s.[¶¶¶]
daf-28; *jxEx105*	0.73±0.15	221 (2)	0.06[†††]	n.s.[¶¶¶]

We assayed wild-type, mutant and rescued worms in parallel in independent trials at different temperatures and show statistics from the cumulative experiments. We used the Wilcoxon Mann-Whitney rank sum test to determine the statistical significance of the differences among the groups.
*The control to which the different worms were compared in each trial.
†Compared with *daf-28(tm2308)* mutants.
‡Compared with *ins-6(tm2416)*; *daf-28(tm2308)* mutants.
§Compared with *daf-2(e1368)*; *daf-28(tm2308)* mutants.
¶Compared with *ins-6(tm2416)*; *daf-2(e1368)*; *daf-28(tm2308)* mutants.
**Compared with *ins-6(tm2416)*; *daf-2(e1368)* mutants.
††Compared with wild type.
‡‡Compared with *ins-6(tm2416)*; *daf-28(tm2308)*; *ins-1(nr2091)* mutants.
§§Compared with wild type carrying the corresponding transgene.
¶¶Compared with *ins-6*; *daf-28*; *jxEx18*, *ins-6*; *daf-28*; *jxEx21* or *ins-6*; *daf-28*; *jxEx22*.
***Compared with *ins-6*; *daf-28* mutants carrying the corresponding transgene.
†††Compared with wild type carrying *jxEx18* or *jxEx21*.
‡‡‡Compared with *ins-6*; *daf-28*; *jxEx18*.
§§§Compared with *ins-6*; *daf-28*; *jxEx21*.
¶¶¶Compared with *daf-28*; *jxEx18* or *daf-28*; *jxEx21*.
n.s., not significant (*P*>0.1). See the Fig. S1 legend concerning the lack of rescue in some animals carrying low levels of the ASI-specific *ins-6* expression construct.