

Main Figures Summary Statistics

Figure 1D

Unpaired t test	
P value	0.017
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.937 df=4
How big is the difference?	
Mean ± SEM of column A	83.81 ± 4.111, n=3
Mean ± SEM of column B	100 ± 0, n=3
Difference between means	16.19 ± 4.111
95% confidence interval	4.772 to 27.6
R squared (eta squared)	0.7949
F test to compare variances	
F, DFn, Dfd	Infinity, 2, 2
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes

Figure 1E

Unpaired t test	
P value	0.4294
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.7923 df=149
How big is the difference?	
Mean ± SEM of column G	92.78 ± 4.492, n=119
Mean ± SEM of column H	100 ± 5.407, n=32
Difference between means	7.223 ± 9.116
95% confidence interval	-10.79 to 25.24
R squared (eta squared)	0.004196
F test to compare variances	
F, DFn, Dfd	2.566, 118, 31
P value	0.0034
P value summary	**
Significantly different (P < 0.05)?	Yes

Figure 1G

dots/nucleus	
Unpaired t test	
P value	0.1018
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.653 df=91
How big is the difference?	
Mean ± SEM of column A	3.95 ± 0.8413, n=20
Mean ± SEM of column B	2.589 ± 0.3649, n=73
Difference between means	-1.361 ± 0.8234
95% confidence interval	-2.997 to 0.2747
R squared (eta squared)	0.02914
F test to compare variances	
F, DFn, Dfd	1.457, 19, 72
P value	0.2577
P value summary	ns
Significantly different (P < 0.05)?	No

Relative intensity/nucleus	
Unpaired t test	
P value	0.1128
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.601 df=91
How big is the difference?	
Mean ± SEM of column J	100 ± 8.859, n=20
Mean ± SEM of column K	86.51 ± 3.689, n=73
Difference between means	-13.49 ± 8.423
95% confidence interval	-30.22 to 3.243
R squared (eta squared)	0.02741
F test to compare variances	
F, DFn, Dfd	1.58, 19, 72
P value	0.1704
P value summary	ns
Significantly different (P < 0.05)?	No

Figure 2A

Unpaired t test	
P value	0.9086
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.1197 df=6
How big is the difference?	
Mean ± SEM of column A	1.003 ± 0.08642, n=4
Mean ± SEM of column C	1.022 ± 0.1254, n=4
Difference between means	0.01823 ± 0.1523
95% confidence interval	-0.3543 to 0.3908
R squared (eta squared)	0.002383
F test to compare variances	
F, DFn, Dfd	2.104, 3, 3
P value	0.5569
P value summary	ns
Significantly different (P < 0.05)?	No

Figure 2C

Unpaired t test	
P value	0.0587
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.899 df=244
How big is the difference?	
Mean ± SEM of column J	100 ± 15.11, n=133
Mean ± SEM of column K	65.42 ± 8.571, n=113
Difference between means	-34.58 ± 18.2
95% confidence interval	-70.43 to 1.28
R squared (eta squared)	0.01457
F test to compare variances	
F, DFn, Dfd	3.659, 132, 112
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes

Figure 2E

Unpaired t test	
P value	7.09E-08
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=5.66 df=156
How big is the difference?	
Mean ± SEM of column A	69.92 ± 4.128, n=79
Mean ± SEM of column C	45.6 ± 1.197, n=79
Difference between means	-24.32 ± 4.298
95% confidence interval	-32.81 to -15.83
R squared (eta squared)	0.1703
F test to compare variances	
F, DFn, Dfd	11.9, 78, 78
P value	<0.0000000001
P value summary	****
Significantly different (P < 0.05)?	Yes

Figure 2F

Unpaired t test	
P value	0.0363
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=2.685 df=6
How big is the difference?	
Mean ± SEM of column D	1 ± 0.101, n=4
Mean ± SEM of column E	0.4756 ± 0.1672, n=4
Difference between means	-0.5244 ± 0.1953
95% confidence interval	-1.002 to -0.04642
R squared (eta squared)	0.5457
F test to compare variances	
F, DFn, Dfd	2.739, 3, 3
P value	0.4299
P value summary	ns
Significantly different (P < 0.05)?	No

Figure 2G

	Discovery?	P value	Mean1	Mean2
0				
5	No	0.387555649	1.178	1.435
10	No	0.020728625	1.2	1.902
30	No	0.026595256	1.084	3.106
60	No	0.023656159	1.028	3.314
120	No	0.232781025	1.169	2.391
Difference	SE of difference	t ratio	df	q value
-0.257	0.2653	0.9687	4	0.391431206
-0.702	0.1894	3.706	4	0.044768682
-2.022	0.5899	3.428	4	0.044768682
-2.286	0.6427	3.557	4	0.044768682
-1.222	0.8697	1.405	4	0.293886044

Figure 3A

Column B vs. Column A	Id1 BMP vs. Id1 FGF	Column D vs. Column C	Id2 BMP vs. Id2 FGF	Column F vs. Column E	Id3 BMP vs. Id3 FGF
Unpaired t test		Unpaired t test		Unpaired t test	
P value	*	P value	0.0322	P value	0.0746
P value summary	ns	P value summary	ns	P value summary	***
Significantly different (P < 0.05)?	Yes	Significantly different (P < 0.05)?	No	Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed	One- or two-tailed P value?	Two-tailed	One- or two-tailed P value?	Two-tailed
t, df	t=3.221 df=4	t, df	t=3.453 df=2	t, df	t=9.348 df=4
How big is the difference?		How big is the difference?		How big is the difference?	
Mean ± SEM of column A	1 ± 0.3057, n=3	Mean ± SEM of column C	1 ± 0.1197, n=2	Mean ± SEM of column E	1 ± 0.1075, n=3
Mean ± SEM of column B	13.73 ± 3.94, n=3	Mean ± SEM of column D	8.156 ± 2.069, n=2	Mean ± SEM of column F	6.8 ± 0.6111, n=3
Difference between means	12.73 ± 3.952	Difference between means	7.156 ± 2.073	Difference between means	5.8 ± 0.6205
95% confidence interval	1.759 to 23.7	95% confidence interval	-1.761 to 16.07	95% confidence interval	4.077 to 7.523
R squared (eta squared)	0.7218	R squared (eta squared)	0.8563	R squared (eta squared)	0.9562
F test to compare variances		F test to compare variances		F test to compare variances	
F, DFn, Dfd	166.1, 2, 2	F, DFn, Dfd	0.012	F, DFn, Dfd	32.29, 2, 2
P value	*	P value	ns	P value	0.0601
P value summary	*	P value summary	ns	P value summary	ns
Significantly different (P < 0.05)?	Yes	Significantly different (P < 0.05)?	No	Significantly different (P < 0.05)?	No
Column H vs. Column G	Id4 BMP vs. Id4 FGF				
Unpaired t test					
P value	**				
P value summary	****				
Significantly different (P < 0.05)?	Yes				
One- or two-tailed P value?	Two-tailed				
t, df	t=7.418 df=4				
How big is the difference?					
Mean ± SEM of column G	1 ± 0.281, n=3				
Mean ± SEM of column H	27.44 ± 3.553, n=3				
Difference between means	26.44 ± 3.564				
95% confidence interval	16.54 to 36.33				
R squared (eta squared)	0.9322				
F test to compare variances					
F, DFn, Dfd	159.9, 2, 2				
P value	*				
P value summary	*				
Significantly different (P < 0.05)?	Yes				

Figure 3C

Unpaired t test
P value 0.000753309
P value summary ***
Significantly different (P < 0.05)? Yes
One- or two-tailed P value? Two-tailed
t, df t=6.288 df=6

How big is the difference?
Mean ± SEM of column D 1 ± 0.5676, n=4
Mean ± SEM of column E 4.627 ± 0.1026, n=4
Difference between means 3.627 ± 0.5769
95% confidence interval 2.216 to 5.039
R squared (eta squared) 0.8682

F test to compare variances
F, DFn, Dfd 30.59, 3, 3
P value 0.0189
P value summary *
Significantly different (P < 0.05)? Yes

Figure 3E
Unpaired t test
P value 2.32E-11
P value summary ****
Significantly different (P < 0.05)? Yes
One- or two-tailed P value? Two-tailed
t, df t=7.205 df=156

How big is the difference?
Mean ± SEM of column E 31.38 ± 1.249, n=79
Mean ± SEM of column F 48.98 ± 2.099, n=79
Difference between means 17.6 ± 2.443
95% confidence interval 12.78 to 22.43
R squared (eta squared) 0.2497

F test to compare variances
F, DFn, Dfd 2.823, 78, 78
P value <0.0001
P value summary ****
Significantly different (P < 0.05)? Yes

Figure 3K
Unpaired t test
P value 8.4E-11
P value summary ****
Significantly different (P < 0.05)? Yes
One- or two-tailed P value? Two-tailed
t, df t=8.877 df=38

How big is the difference?
Mean ± SEM of column A 105.7 ± 5.727, n=20
Mean ± SEM of column B 36.75 ± 5.25, n=20
Difference between means -68.96 ± 7.769
95% confidence interval -84.69 to -53.24
R squared (eta squared) 0.6746

F test to compare variances
F, DFn, Dfd 1.19, 19, 19
P value 0.7084
P value summary ns
Significantly different (P < 0.05)? No

Figure 4D

Unpaired t test
P value 3.05E-09
P value summary ****
Significantly different (P < 0.05)? Yes
One- or two-tailed P value? Two-tailed
t, df t=6.233 df=184

How big is the difference?
Mean ± SEM of column G 100 ± 6.793, n=93
Mean ± SEM of column H 54.1 ± 2.842, n=93
Difference between means -45.9 ± 7.364
95% confidence interval -60.42 to -31.37
R squared (eta squared) 0.1743

F test to compare variances
F, DFn, Dfd 5.713, 92, 92
P value <0.0001
P value summary ****
Significantly different (P < 0.05)? Yes

Figure 4E
Paired t test
P value 0.8739
P value summary ns
Significantly different (P < 0.05)? No
One- or two-tailed P value? Two-tailed
t, df t=0.1798 df=2
Number of pairs 3

How big is the difference?
Mean of differences -0.02549
SD of differences 0.2455
SEM of differences 0.1418
95% confidence interval -0.6354 to 0.5844
R squared (partial eta squared) 0.01591

How effective was the pairing?
Correlation coefficient (r) -0.1451
P value (one tailed) 0.4537
P value summary ns
Was the pairing significantly effective? No

Figure 4G

Paired t test
P value 0.05
P value summary *
Significantly different (P < 0.05)? Yes
One- or two-tailed P value? Two-tailed
t, df t=3.183 df=3
Number of pairs 4

How big is the difference?
Mean of differences -21.11
SD of differences 13.27
SEM of differences 6.633
95% confidence interval -42.22 to -0.001007
R squared (partial eta squared) 0.7715

How effective was the pairing?
Correlation coefficient (r) -0.07008
P value (one tailed) 0.465
P value summary ns
Was the pairing significantly effective? No

Figure 4I

Paired t test
P value 0.1148
P value summary ns
Significantly different (P < 0.05)? No
One- or two-tailed P value? Two-tailed
t, df t=2.691 df=2
Number of pairs 3

How big is the difference?
Mean of differences -8.833
SD of differences 5.686
SEM of differences 3.283
95% confidence interval -22.96 to 5.292
R squared (partial eta squared) 0.7835

How effective was the pairing?
Correlation coefficient (r) 0.7231
P value (one tailed) 0.2427
P value summary ns
Was the pairing significantly effective? No

Figure 4K

Unpaired t test
P value 0.0131
P value summary *
Significantly different (P < 0.05)? Yes
One- or two-tailed P value? Two-tailed
t, df t=2.528 df=98

How big is the difference?
Mean ± SEM of column G 100 ± 7.731, n=51
Mean ± SEM of column H 142.5 ± 15.16, n=49
Difference between means 42.52 ± 16.82
95% confidence interval 9.138 to 75.9
R squared (eta squared) 0.06121

F test to compare variances
F, DFn, Dfd 3.694, 48, 50
P value <0.0001
P value summary ****
Significantly different (P < 0.05)? Yes

Figure 4L

Paired t test
P value 0.0758
P value summary ns
Significantly different (P < 0.05)? No
One- or two-tailed P value? Two-tailed
t, df t=3.423 df=2
Number of pairs 3

How big is the difference?
Mean of differences -0.3785
SD of differences 0.1915
SEM of differences 0.1106
95% confidence interval -0.8543 to 0.09724
R squared (partial eta squared) 0.8542

How effective was the pairing?
Correlation coefficient (r) 0.746
P value (one tailed) 0.232
P value summary ns
Was the pairing significantly effective? No

Figure 4N

%KI67+
Paired t test
P value 0.0485
P value summary *
Significantly different (P < 0.05)? Yes
One- or two-tailed P value? Two-tailed
t, df t=4.372 df=2
Number of pairs 3

How big is the difference?
Mean of differences 35.48
SD of differences 14.06
SEM of differences 8.116
95% confidence interval 0.5627 to 70.4

%EdU+
Paired t test
P value 0.085
P value summary ns
Significantly different (P < 0.05)? No
One- or two-tailed P value? Two-tailed
t, df t=3.208 df=2
Number of pairs 3

How big is the difference?
Mean of differences 4.904
SD of differences 2.648
SEM of differences 1.529
95% confidence interval -1.674 to 11.48

R squared (partial eta squared) 0.9053 R squared (partial eta squared) 0.8373

How effective was the pairing? How effective was the pairing?

Correlation coefficient (r) 0.9999 Correlation coefficient (r) 0.6835

P value (one tailed) 0.004 P value (one tailed) 0.2604

P value summary ** P value summary ns

Was the pairing significantly effective? Yes Was the pairing significantly effective? No

Figure 5E

Gene name	logFC	logCPM	LR	PValue	FDR
Dil1	-2.16653603	5.151465748	44.15167485	3.04E-11	1.44E-09
Dil3	-1.605697967	0.774961332	22.23532548	2.41E-06	4.63E-05
Skp2	-2.263976591	5.234419896	73.61448822	9.50E-18	1.65E-15
Birc5	-2.351352295	5.058298298	50.3062338	1.32E-12	7.82E-11
Cdk1	-2.46413008	6.515691283	78.38606663	8.47E-19	2.09E-16
Cdk2	-1.016666564	5.861506896	12.71589534	0.000362561	0.00342061
Foxm1	-2.173282828	6.186910054	56.14989656	6.72E-14	5.20E-12
Egfr	-1.175714979	8.57757694	20.41016581	6.25E-06	0.000108167
Rrm2	-2.782875601	7.21832039	100.6004661	1.13E-23	1.28E-20
Fbl	-1.102638987	6.612927396	20.85305929	4.96E-06	8.75E-05

Gene name	Counts per Million		
	BLO567A1_FGF_GFP_1	BLO567A2_FGF_GFP_2	BLO567A3_FGF_GFP_3
Dil1	2063	1062	1002
Dil3	51	70	53
Skp2	1439	1722	1262
Birc5	1061	1480	1408
Cdk1	3037	3974	3997
Cdk2	1643	1959	1926
Foxm1	2307	3034	3130
Egfr	13198	11667	12829
Rrm2	5223	6983	6285
Fbl	3547	3093	2859

Gene name	Counts per Million		
	BLO567A10_FGF_ID4_1	BLO567A11_FGF_ID4_2	BLO567A12_FGF_ID4_3
Dil1	296	268	359
Dil3	21	17	18
Skp2	276	327	320
Birc5	200	183	402
Cdk1	610	552	847
Cdk2	734	723	1302
Foxm1	479	573	844
Egfr	6884	4936	4848
Rrm2	1067	756	864
Fbl	1497	1460	1472

Figure 6C

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
Id4 fl/+ vs. Id4 fl/fl	-7.349	-14.2 to -0.4996	Yes	*	0.0381
Id4 fl/+ vs. Id4 +/-	3.504	-3.346 to 10.35	No	ns	0.3276
Id4 fl/fl vs. Id4 +/-	10.85	4.003 to 17.7	Yes	**	0.0067

Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	N1
Id4 fl/+ vs. Id4 fl/fl	7.937	15.29	-7.349	2.232	4
Id4 fl/+ vs. Id4 +/-	7.937	4.433	3.504	2.232	4
Id4 fl/fl vs. Id4 +/-	15.29	4.433	10.85	2.232	4

Figure 6D

Unpaired t test	P value	P value summary	Significantly different (P < 0.05)?	One- or two-tailed P value?	t, df
Column R vs. Column Q	2.01749E-05	****	Yes	Two-tailed	t=4.313 df=413

How big is the difference?	Mean ± SEM of column Q	Mean ± SEM of column R	Difference between means	95% confidence interval	R squared (eta squared)
	100 ± 6.474, n=236	161.6 ± 14, n=179	61.57 ± 14.27	33.51 to 89.63	0.0431

F test to compare variances	F, DFn, Dfd	P value	P value summary	Significantly different (P < 0.05)?
	3.546, 178, 235	<0.0001	****	Yes

Figure 6E

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
Id4 +/fl vs. Id4 fl/fl	-2.069	-5.672 to 1.534	No	ns	0.3157
Id4 +/fl vs. Combined Id4wt	0.1065	-3.497 to 3.71	No	ns	0.9967
Id4 fl/fl vs. Combined Id4wt	2.176	-1.588 to 5.939	No	ns	0.3113

Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1
Id4 +/fl vs. Id4 fl/fl	3.151	5.22	-2.069	1.365	6
Id4 +/fl vs. Combined Id4wt	3.151	3.044	0.1065	1.365	6
Id4 fl/fl vs. Combined Id4wt	5.22	3.044	2.176	1.425	5

B-C
B-E
C-E

n2

q

DF

5	2.144	13
5	0.1103	13
5	2.158	13

Figure 6G

Number of families 1
 Number of comparisons per family 3
 Alpha 0.05

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
ld4 +/- vs. ld4 fl/+	-1.336	-7.003 to 4.331	No	ns	0.7595
ld4 +/- vs. ld4 fl/fl	-9.593	-15.26 to -3.927	Yes	**	0.0049
ld4 fl/+ vs. ld4 fl/fl	-8.257	-13.92 to -2.591	Yes	*	0.0101

Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	N1	
ld4 +/- vs. ld4 fl/+	4.142		5.478	-1.336	1.847	4
ld4 +/- vs. ld4 fl/fl	4.142		13.73	-9.593	1.847	4
ld4 fl/+ vs. ld4 fl/fl	5.478		13.73	-8.257	1.847	4
			N2	q	DF	
				4	1.023	6
				4	7.346	6
				4	6.323	6

Figure 6H

Number of families 1
 Number of comparisons per family 3
 Alpha 0.05

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
ld4 fl/+ vs. ld4 fl/fl	-2.53	-4.086 to -0.9735	Yes	**	0.0026
ld4 fl/+ vs. Combined ld4wt	-0.1114	-1.668 to 1.445	No	ns	0.9801
ld4 fl/fl vs. Combined ld4wt	2.419	0.8621 to 3.975	Yes	**	0.0036

Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	
ld4 fl/+ vs. ld4 fl/fl	2.658		5.188	-2.53	0.5834	5
ld4 fl/+ vs. Combined ld4wt	2.658		2.769	-0.1114	0.5834	5
ld4 fl/fl vs. Combined ld4wt	5.188		2.769	2.419	0.5834	5
			C-D			
			C-E			
			D-E			
			n2	q	DF	
				5	6.133	12
				5	0.2701	12
				5	5.863	12

Figure 6J

Unpaired t test
 P value ** 0.0016
 P value summary
 Significantly different (P < 0.05)? Yes
 One- or two-tailed P value? Two-tailed
 t, df t=7.658 df=4
 How big is the difference?
 Mean ± SEM of column A 38.37 ± 4.561, n=3
 Mean ± SEM of column B 74.16 ± 1.017, n=3
 Difference between means 35.79 ± 4.673
 95% confidence interval 22.81 to 48.76
 R squared (eta squared) 0.9361
 F test to compare variances
 F, DFn, Dfd 20.13, 2, 2
 P value 0.0946
 P value summary ns
 Significantly different (P < 0.05)? No

Figure 6L

Unpaired t test
 P value **** 1.87108E-06
 P value summary
 Significantly different (P < 0.05)? Yes
 One- or two-tailed P value? Two-tailed
 t, df t=42.28 df=4
 How big is the difference?
 Mean ± SEM of column B 9.779 ± 1.049, n=3
 Mean ± SEM of column D 75.31 ± 1.141, n=3
 Difference between means 65.54 ± 1.55
 95% confidence interval 61.23 to 69.84
 R squared (eta squared) 0.9978
 F test to compare variances
 F, DFn, Dfd 1.182, 2, 2
 P value 0.9165
 P value summary ns
 Significantly different (P < 0.05)? No

Supplementary Figures Summary Statistics

Figure S16

Multiple tests	Discovery?	P value	Mean1	Mean2	Difference	SE of difference	t ratio	df	q value
0	No	0.38759549	1.178	1.435	-0.257	0.2053	0.9687	4	0.39143205
10	No	0.02072825	1.2	1.902	-0.702	0.1884	3.706	4	0.04768862
30	No	0.00595255	1.084	3.106	-2.022	0.5989	3.428	4	0.04178562
60	No	0.023656159	1.028	3.314	-2.286	0.6427	3.557	4	0.04478862
120	No	0.232781025	1.169	2.391	-1.222	0.8607	1.405	4	0.29380644

Figure S11

Unpaired t test

P value summary: $+0.0000000000001$

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 15.16, df=415

How big is the difference?

Mean ± SEM of column M: 34.62 ± 0.7823, n=218

Mean ± SEM of column N: 30.4 ± 0.292, n=199

Difference between means: 65.38 ± 4.175

95% confidence interval: 57.18 to 73.59

R squared (eta squared): 0.3715

F test to compare variances

F, DFs, Df: 29.71, 198, 217

P value: $+0.001$

Significantly different (P < 0.05)? Yes

Figure S2L

Time	Discovery?	P value	Mean1	Mean2	Difference	SE of difference	t ratio	df	q value
0	No	0.3730097	1	1	-1.667E-08	1.667E-08	4.24	4	0.18891999
15	Yes	0.01026026	1.12	0.659	0.4338	0.1023	4.24	4	0.00857255
30	Yes	0.00157503	0.9927	0.4888	0.5039	0.0954	7.642	4	0.00190595
60	Yes	0.00025643	0.9135	0.3477	0.5658	0.0653	9.049	4	0.00120291
120	Yes	0.01473161	0.7754	0.1621	0.6133	0.1482	4.11	4	0.00827355
240	Yes	0.00093988	0.3403	0.02546	0.3148	0.0288	10.93	4	0.00120493

Figure S3C

Unpaired t test

P value: 0.007

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 12.88, df=36

How big is the difference?

Mean ± SEM of column D: 80.36 ± 7.817, n=19

Mean ± SEM of column E: 114.2 ± 8.901, n=19

Difference between means: 33.86 ± 11.85

95% confidence interval: 9.857 to 57.91

R squared (eta squared): 0.1852

F test to compare variances

F, DFs, Df: 1.297, 18, 18

P value: 0.5875

Significantly different (P < 0.05)? No

Figure S4A

Unpaired t test

P value summary: *

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 11.478, df=3

How big is the difference?

Mean ± SEM of column B: 5.912 ± 1.314, n=3

Mean ± SEM of column C: 15.56 ± 1.111, n=2

Difference between means: 18.614 ± 1.377

95% confidence interval: 2.635 to 14.65

R squared (eta squared): 0.8748

F test to compare variances

F, DFs, Df: 1.297, 2, 2

P value: 0.5875

Significantly different (P < 0.05)? No

Figure S4E

Column C vs. Column B	Column D vs. Column B	Column E vs. Column B	Column F vs. Column B
161	162	163	164
Column C	Column D	Column E	Column F
vs.	vs.	vs.	vs.
Empty	Empty	Empty	Empty

Unpaired t test

P value: 0.0003

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 11.478, df=3

How big is the difference?

Mean ± SEM of column B: 14.16 ± 0.9912, n=3

Mean ± SEM of column D: 7.073 ± 0.9516, n=3

Difference between means: -7.082 ± 1.139

95% confidence interval: -10.24 to -3.919

R squared (eta squared): 0.9006

F test to compare variances

F, DFs, Df: 3.115, 2, 2

P value: 0.48

Significantly different (P < 0.05)? No

Figure S4F

Column B vs. Column A	Column C vs. Column A	Column D vs. Column A	Column E vs. Column A	Column F vs. Column A
161 ABC 20M each 48h	162 ABC 20M each 48h	163 ABC 20M each 48h	164 ABC 20M each 48h	165 ABC 20M each 48h
vs.	vs.	vs.	vs.	vs.
Scrambled 60M 48h	Scrambled 60M 48h	Scrambled 60M 48h	Scrambled 60M 48h	Scrambled 60M 48h

Paired t test

P value: 0.488

Significantly different (P < 0.05)? No

One- or two-tailed P value? Two-tailed

t, df: 10.8421, df=2

Number of pairs: 3

How big is the difference?

Mean of differences: 18.27

SD of differences: 37.46

SEM of differences: 21.86

95% confidence interval: -74.85 to 111.3

R squared (partial eta squared): 0.2619

How effective was the pairing?

Correlation coefficient (r): 0.0279

P value (one tailed): 0.9863

Was the pairing significantly effective? No

Figure S4G

Column B vs. Column A	Column C vs. Column A	Column D vs. Column A	Column E vs. Column A	Column F vs. Column A	Column G vs. Column A
161 ABC 20M each 48h	162 ABC 20M each 48h	163 ABC 20M each 48h	164 ABC 20M each 48h	165 ABC 20M each 48h	166 ABC 20M each 48h
vs.	vs.	vs.	vs.	vs.	vs.
Scrambled 60M 48h	Scrambled 60M 48h	Scrambled 60M 48h	Scrambled 60M 48h	Scrambled 60M 48h	Scrambled 60M 48h

Paired t test

P value: 0.004

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 11.357, df=2

Number of pairs: 3

How big is the difference?

Mean of differences: -0.58

SD of differences: 11.45

SEM of differences: 6.76

95% confidence interval: -67.96 to 38.21

R squared (partial eta squared): 0.9916

How effective was the pairing?

Correlation coefficient (r): -0.9899

P value (one tailed): 0.0519

Was the pairing significantly effective? No

Figure S4H

Column F vs. Column A	Column I vs. Column A	Column J vs. Column A	Column K vs. Column A	Column L vs. Column A	Column M vs. Column A
161 ABC 20M each 48h	164 ABC 20M each 48h	165 ABC 20M each 48h	166 ABC 20M each 48h	167 ABC 20M each 48h	168 ABC 20M each 48h
vs.	vs.	vs.	vs.	vs.	vs.
Scrambled 60M	Scrambled 60M	Scrambled 60M	Scrambled 60M	Scrambled 60M	Scrambled 60M

Unpaired t test

P value: 0.0006

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 11.401, df=2

Number of pairs: 3

How big is the difference?

Mean of differences: -30.0

SD of differences: 4.45

SEM of differences: 2.59

95% confidence interval: -39.23 to 20.8

R squared (partial eta squared): 0.9899

How effective was the pairing?

Correlation coefficient (r): 0.884

P value (one tailed): 0.0568

Was the pairing significantly effective? No

Figure S3G

Unpaired t test

P value: $+0.9999$

Significantly different (P < 0.05)? No

One- or two-tailed P value? Two-tailed

t, df: 11.856-093, df=373

How big is the difference?

Mean ± SEM of column C: 100 ± 4.972, n=57

Mean ± SEM of column D: 100 ± 2.408, n=318

Difference between means: 1.122E-008 ± 6.0568

95% confidence interval: -11.93 to 11.93

R squared (eta squared): 0.173E-21

F test to compare variances

F, DFs, Df: 1.309, 517, 56

P value: 0.2221

Significantly different (P < 0.05)? No

Figure S4B

Unpaired t test

P value summary: ns

Significantly different (P < 0.05)? No

One- or two-tailed P value? Two-tailed

t, df: 11.7701, df=4

How big is the difference?

Mean ± SEM of column B: 27.5 ± 4.204, n=3

Mean ± SEM of column L: 22.81 ± 3.645, n=3

Difference between means: 4.693 ± 1.551

95% confidence interval: -2.83 to 12.75

R squared (eta squared): 0.1291

F test to compare variances

F, DFs, Df: 2.038, 2, 2

P value: 0.6583

Significantly different (P < 0.05)? No

Figure S4C

Column D vs. Column B	Column E vs. Column B	Column F vs. Column B
162	163	164
Column D	Column E	Column F
vs.	vs.	vs.
Empty	Empty	Empty

Unpaired t test

P value: 0.0006

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 11.9791, df=4

How big is the difference?

Mean ± SEM of column B: 14.16 ± 0.9912, n=3

Mean ± SEM of column E: 14.16 ± 0.9912, n=3

Difference between means: 2.889 ± 0.5845, n=3

95% confidence interval: -11.27 to 1.51

R squared (eta squared): 0.9599

F test to compare variances

F, DFs, Df: 2.875, 2, 2

P value: 0.5161

Significantly different (P < 0.05)? No

Figure S4D

Column D vs. Column A	Column E vs. Column A	Column F vs. Column A
162	163	164
Column D	Column E	Column F
vs.	vs.	vs.
Empty	Empty	Empty

Unpaired t test

P value: 0.0006

Significantly different (P < 0.05)? Yes

One- or two-tailed P value? Two-tailed

t, df: 11.9791, df=4

How big is the difference?

Mean ± SEM of column B: 14.16 ± 0.9912, n=3

Mean ± SEM of column F: 2.889 ± 0.5845, n=3

Difference between means: -14.46 ± 0.072

95% confidence interval: -14.46 to 0.072

R squared (eta squared): 0.9599

F test to compare variances

F, DFs, Df: 2.875, 2, 2

P value: 0.5161

Significantly different (P < 0.05)? No

R squared (eta squared)		0.8646	R squared (eta squared)		0.9668
F test to compare variances			F test to compare variances		
F, DF(1, 24)	5.622, 2, 2		F, DF(1, 24)	1.833, 2, 2	
P value		0.302	P value		0.7061
P value summary	ns		P value summary	ns	
Significantly different (P < 0.05)?	No		Significantly different (P < 0.05)?	No	